

```
<210> 5466
<211> 4305
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(3140)
<223> similar to gi4240219 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5466
cgagcaagtg gaatgtgtac aagagggagt taccatggaa acagcatatt ctcctggtaa
                                                                       60
ccagaatgga gttttggact tttttttcca gaagccatct ggatttctca ccttattqqa
                                                                      120
tgaagaaagt caaatgattt ggtcagtgga atcaaatttt ccaaaaaaac tacaaagtct
                                                                      180
cctagaatcc tcaaacacaa atgcggtgta ctcccccatg aaggatggga atgggaatgt
                                                                      240
tgccctcaaa gaccacggta cagccttcac catcatgcac tacgcaggaa gggtaatgta
                                                                      300
tgatgttgtt ggggcgattg aaaaaaataa agactccctt tcacagaatc ttctatttgt
                                                                      360
aatgaaaact agtgaaaatg tegtgateaa teatttgtte eagtegaaat tgteacaaae
                                                                      420
aggatecete gtatetgeet ateetteett taaatteega ggacataagt etgeeetget
                                                                      480
```

```
cagtaagaaa atgacagctt cttcaattat tggagaaaac aagaattatc tagaacttag
                                                                      540
taagttatta aaaaagaaag gaacttctac atttcttcaa agattggaac gaggagatcc
                                                                      600
agtcaccata gcatcacaac tcaggaaatc actaatggat attattggaa aacttcagaa
                                                                      660
gtgcactcca cacttcattc attgcatcag gcccaataac tcaaagctgc cagatacttt
                                                                      720
tgataatttt tacgtgtctg ctcagctaca atatattggg gtcctggaga tggtgaagat
                                                                      780
cttccgatat ggataccctg ttcgcctttc cttctcggat ttcctgtcaa ggtataagcc
                                                                      840
actggctgat acattcctgc gtgagaagaa ggaacagtca gctgccgagc gatgtcgact
                                                                      900
tgttctccag cagtgtaaat tacaaggctg gcagatggga gtccgaaaag tgtttctaaa
                                                                      960
atactggcat gctgaccaac tcaatgattt gtgcctacag ttgcagagaa aaattataac
                                                                     1020
ctgccaaaaa gttatcagag gatttttagc acgccagcac ctgcttcaga gaataagcat
                                                                     1080
cagacaacaa gaggtgactt ctatcaatag ctttctgcag aacacagagg acatggggct
                                                                     1140
gaaaacctac gatgccctgg tcattcagaa tgcttcagac attgcccggg aaaatgaccg
                                                                     1200
gctccgtagt gaaatgaacg ctccctacca taaagagaag ttagaggtca ggaacatgca
                                                                     1260
agaggaagga agcaaaagaa ccgatgacaa gagtggaccc aggcatttcc accccagctc
                                                                     1320
catgtcagtc tgcgcggccg tggatggcct gggccagtgc ctcgttggcc cgtccatctg
                                                                     1380
gtctccttcg ctgcactcgg tgttcagcat ggatgacagc agcagcctcc cgtctccacg
                                                                     1440
gaaacagccc ccgcccaagc caaagaggga ccccaacacc cggctgagtg cttcctatga
                                                                     1500
ggctgtgagc gcctgcctct ccgcggccag ggaagcggcc aacgaagctc tggcccggcc
                                                                     1560
cagaccgcac agcgacgact acagcaccat gaagaagatt cctcctcgaa agcccaagcg
                                                                     1620
cagccccaac accaagctca gcggctccta cgaggagata tcggggtccc ggcccgggga
                                                                     1680
cgcgaggccc gcgggcccc cgggggcagc agcgcgcgtt ctgacccccg ggactccgca
                                                                     1740
gtgcgcgctg cccccggcgg cgcctccggg tgacgaggac gacagcgagc ctgtgtacat
                                                                     1800
cgagatgctg gggcacgcgg ccaggcccga tagcccggac cccggggagt ccgtgtacga
                                                                     1860
ggagatgaag tgttgcctgc ccgacgacgg cggcccgggc gcgggctcct tcctgctcca
                                                                     1920
cggcgcatcg ccgcccctgc tccaccgcgc gccggaggac gaggcggcgg ggcccccagg
                                                                     1980
ggacgcgtgc gacatcccgc cgcccttccc caacctgctg ccgcaccggc cgcccctgct
                                                                     2040
ggtgttcccc ccgacccccg tcacctgctc ccccgcctcc gacgagtcgc ccctgacacc
                                                                     2100
cctggaggtg aagaagctgc cagtcctgga gaccaacctc aagtaccccg tgcagccgga
                                                                     2160
ggggtcgagc ccgctgtccc cgcagtactc caagagccag aagggcgacg gcgacaggcc
                                                                     2220
cgcgtccccc ggcctggcgc tgttcaacgg gtccggccga gcctccccgc cgtccacgcc
                                                                     2280
geoceegeee eegeeceege eegggeegee eeeegegeee tacaggeeet gegegeactt
                                                                     2340
ggccttcccg ccggagcccg ccccggtgaa cgcggggaaa gcggggccga gcgcagaggc
                                                                     2400
gcccaaggtc cacccaaagc caaactctgc ccccgtggcc gggccctgca gctccttccc
                                                                     2460
caagatccca tattcccccg tgaaggccac cagggcggac gccaggaagg ccggctccag
                                                                     2520
tgcctcgccc cccgcgccct acagccctcc cagctccagg cctctcagca gccccctgga
                                                                     2580
cgagctcgcc agcctcttca actcggggag gagtgtgctt cggaaatccg cggcgggaag
                                                                     2640
aaaaatcagg gaagccgaag gttttgaaac taacatgaac ataagtagcc gagatgaccc
                                                                     2700
tagtacgtca gaaattactt ccgagactca agacagaaat gcaaataacc atggaattca
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gttatctaat tcactatcta gtgctataac tgctgaaaat ggaaattcca tctcaaatgg
                                                                     2820
tttacctgaa gaagatggat actcacggtt gtctataagt ggcacaggga cttcgacatt
                                                                     2880
tcaaagacac agggacagtc acaccactca ggtaatccat cagctgaggc tctcagagaa
                                                                     2940
tgaaagtgtg gccctgcagg aactcttgga ctggaggaga aagctctgtg aggaaggaca
                                                                     3000
agactggcag cagatectge accaegetga geceagggtg cetececeae caeettgeaa
                                                                     3060
gaagcccagc cttctgaaga agccggaagg ggcctcctgc aacaggctgc cgtctgagct
                                                                     3120
ctgggacacc accatttgat gtggcctgaa ctgcagactt acaaaataga actgcctact
                                                                     3180
gattccgggc tgcaacaaca gaaggctgcc ttctgacatg cgctggggct tctctccacg
                                                                     3240
catttagaca aaaaaagcac aggacacaga cactaaatat atgagatccc gtgtgtgtgt
                                                                     3300
gtgtgtgttt gtgtgtgt gtgtgggttc tttcttatcc atctcggggg gatacactct
                                                                     3360
gattttcaag ctcctcattt acggctctgt gctaccccta ggtagcaaga gagaggctgg
                                                                     3420
gaaaagtgtg gacgtggcca gagcgagaga gtagcggagg aaaggagcaa tccatgcaca
                                                                     3480
ctctgtacag ttgttttct acggttcaac agtctgttta ttgtacttcc aatggtttta
                                                                     3540
ttataataca gtatacggga catatatttt atttctttgt agctacttgt gttttattgg
                                                                     3600
tattataaac ctgataatta tttacatgtt tattactgta attttataaa tttatgcaat
                                                                     3660
tggtggtgct tcctttcttc aaaatacaga ttttaaaaaa tcatttctag attatytctc
                                                                     3720
ytcctccaca gtcctttttt tttcacctaa cgcacctaaa tcttgaaact acattgttgt
                                                                     3780
tttagcttcg ccagtgtcac cccttgcaaa actatgaatt gagccccatg ttttaggtgt
                                                                     3840
tactcatgga tgaggaggct gttctttcct atgccctgta tttctggata agtggattgt
                                                                     3900
```

```
gcmacccytt agttaaattt cacctcccga cttcmagcat agatcacagg amatcacatg 3960 gcacacggtt aaacacgtat ggcttcaaat ccatagccgg tggtgtaaaa tgatcatatt 4020 cattcaaagg cctacacagt acaaatgagc acgctgccat gtactggttt gagcagtagg 4080 ggctgcatcg cacagcgcct cgtccccgg gacttacact gcatgattcc ctcgctgtat 4140 atcctcaacc ctcccataat gcaaggcctt gttcattgat gtgctttcgt cggctgtcgg 4200 aaagttctga gcagtggctc cagaccacct tgtcttgcta cttggaactt tttattcata 4260 ccagcctttg aaaagttact gtgccaataa agaggtacaa ctgtg
```

```
<210> 5467

<211> 2436

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (13)...(1228)

<223> similar to gi3808148 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5467 cgaacctcag tcaaggtgaa gttctcggag ctgtccgagg agctgctctg ggaatacgtc 60 cacagtgtgg agcccatgga caaagctggc ggctacggga tccaggccct gggcggcatg 120 ctggtggagt ccgtacacgg ggactttctg aacgtggtgg gattcccgct gaaccacttc 180 tgcaagcagc tggtgaagct ctactacccg ccccgtccgg aggacctgcg gcggagtgtc 240 aagcacgact ccatcccggc cgcggacacc ttcgaagacc tcagtgacgt ggagggggt 300 ggctcggagc ccactcagag ggacgcgggc agccgcgatg agaaggccga ggcgggaqaq 360 gcgggacagg ccacggcaga ggctgagtgt cacaggactc gggagaccct gcctccgttc 420 ccgacacgcc tcctggagct gattgagggc tttatgctat ccaaqqqcct qctcaccqct 480 tgcaaactga aggtgttcga tttgttaaaa gatgaagcac cccagaaggc tgcggatatt 540 gccagcaaag tggacgcctc tgcgtgtgga atggagaggc ttctggacat ctgtgctgcc 600 atggggctcc tggagaagac agagcaaggt tacagtaaca cagagacagc gaacgtctac 660 ctggcatcgg atggcgaata ctctctgcac ggcttcatca tgcacaataa tgacctcaca 720 tggaacctct ttacatacct ggagtttgcc atccgagagg gaacaaacca gcaccacagg 780 gcgttgggga agaaggcgga agatctgttc caggatgcgt actaccagag cccggagacg 840 eggetgaggt teatgeggge catgeaegge atgaegaage tgaetgegtg ceaggtggee 900 acggccttca atctgtcccg cttctcctcc gcctgcgacg tgggaggctg caccggtgca 960 ctggcccgag agctggcccg tgagtaccct cgtatgcagg tgactgtgtt tgacctccca 1020 gacattatcg agctggccgc ccacttccaa cccccggac cgcaggcagt gcagatccac 1080 ttcgcagcag gtgacttttt cagggacccc ctccccagcg ctgagctgta cqtcctqtqc 1140 cggatcctgc atgactggcc agacgacaaa gtccacaagt tactcagcag ggtcgccgag 1200 agegttetga geteetgttg eetgetgtgt eeeetgtgte etgetgaagg ateeeegeet 1260 ggetggeeag gaeteeaget etetgetgte teeeteaggg geeggeetge tgetggtgga 1320 gacgctcctc ctagcaggca gacggctgct gtgacggtgc cgtctaccag gcagggtctc 1380 agtccttctc cgcactccag cctgcatctt cccatcttct gcacgatttc cagtgtgttt 1440 cctccatggg acgccatcgc tgccgctcac ccctggatgc ccacaggcta tggagtggca 1500 gttctctggg cggcttccat ctctcctgcc ttggtgcaga gactgtcacg agcgggacct 1560 ccccagccc tgctgcgggg ctgaaatgcg tctgtaaaca cccccaccc cgagcccagg 1620 caggccagac tcacacccac cccgtgaggc cctcctgggc acatgctcac tgcggttgta 1680 gggageteag egeateeacg ttteceeegt geteegetee eagetgetgt teeeggeetg 1740 tgtcccgacc ctcagacctc agttcaccct ctggtgccca cacaqccccc tttcctccct 1800

```
ggcccctcca ccagggaatg gctgggccaa cctggggctg ggctggggtg gagcccttta
                                                                     1860
actcacagee ttgacettag gaggeactga ggttcaggag geatetgeaa agegagaace
                                                                     1920
ggagcaggcc taggtgctgt tttcacggcg cgtgcaccca gcttacctgt tcctgggctg
                                                                     1980
ggcgtcagtc tcctatattt cagctgtttt cctttttctg agacagactc tggagtttag
                                                                     2040
ctcttcttac ccagactgga gtacaataat gcaatctcgg ctcactgcaa cctccgcctc
                                                                     2100
ctgggcagtc tatttcaagg tgcaaactcc gcctcctggg cggcctattt caaggtggaa
                                                                     2160
qccccacctt ctaggcctat ttcaaggtgc aagccccgcc tcccgggcgg cctattacaa
                                                                    2220
ggtgcaaget cegeeteeca ggeggeetgt tteaaggtge aacceeacet eeegggegge
                                                                     2280
ctatttcaag gggcaagccc tgcctcctgg gcggcctata tcaaggtgcg agctctgcct
                                                                     2340
cccaggcage ctatttcaag gtgcaacece geeteetggg eggeetattt caaggggcaa
                                                                    2400
gccccgcctc ctgggtggcc tatttcaagg ggcaag
                                                                     2436
```

```
<211> 1129
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1114)...(387)
    <223> similar to gi4579696 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5468
ttttcaagca cgattccttt atttcgagcc agaaagcagc cagtaaacaa gtgctgccac
                                                                   60
ccacaacacc ctgggctacc tgcggtcccg cgcctggccc tgcagcctcg gaagggagct
                                                                   120
gtgggggtca cccagggccc acttcgtgcc cccaccctgc cccaccctg ccctgctcac
                                                                   180
teccageege tgeteeeett eetaaagage agteeetget tgagagetet gaggageaae
                                                                   240
ttgtttctaa tccacaggat cctgcactaa gagcccccc cacagctatc gtggggcacc
                                                                   300
ccaacgtatt ccaccctct gccccaggca cccaaggggc atgggcacgg ccagaaggcc
                                                                   360
tgtcaggagg gccagcagca cccccgaggc ttgtccccaa ggttgggcgg tttggggctg
                                                                   420
gcgggcacgt tctccaggac ctcacgcagg gagaatgtac aaaaggaaat ctcatcatag
                                                                   480
gaggtcctgg ccccgctctc gtacaggcag gcaaaaacca ggccccctc aggggccggc
                                                                   540
ccgatggacg ccaggtcgga gtagccgctg gggccctcgt agatcaccca gggctctgtc
                                                                   600
cagctgcgcg ggtccagcgg ggactggctc aggcggatac ccatgtgtag ccgagcctg
                                                                   660
720
atggggagtg ccagggtcca ggaccccaca tccccactga ccccaggcct ggggccaggc
                                                                   780
tgcctggggc catcccccg aggctgcaga cggctgaagg gcccaccagg cacctggcct
                                                                   840
ccacgggggt ctacagcagc ctcctctggg ggttcgtgga ctccaggacc gaggagtgga
                                                                  900
ggctggaggg gactcccggg gcccactgac caactgtcat cccgtggcct gttgggggcg
                                                                  960
ggggctggga agcccacgat gctgccctgg cagccccagg cagtctcggg cagggaagcc
                                                                  1020
acgcgctctg cgggcaggaa ggaggtgccc tcgtcagtgc tgagcgcctg cacacggctg
                                                                  1080
cccagtgggc tccgggcatt gcagtagagg aagcgggaat tgcacctct
                                                                  1129
```

<210> 5469 <211> 2414

<210> 5468

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)...(1625)
<223> similar to gi5917651 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5469 agcgtacgcc cacgcgtccg caagggaaca actctgagaa tgatgaggaa ggagtggatg 60 aagatgtgga ggaagatgaa tatttagaag aagatgcaga agaagatgaa gaggtggatg 120 aagatggaga ggaggaggag gaagaggagg aggaggaaga tgaggaggag gatgaggaag 180 aacaagaata tgaacaggat gagagagacc agaaagagga gggaaatgat tatgacactc 240 gaagtgaggc cagtgactct ggttctgaat ctgtttcctt cacagatggg tctgtcagat 300 ctggttcagg cacagatgga tcagatgaga aaaagaagga aaggaagaga gctagaggca 360 tatctccaat tgtttttgat agaagtggaa gctctgcatc agagtcatat gcaggttcag 420 aaaagaagca tgagaaatta tcatcttccg ttcgtgctgt ccgaaaagat caaaccagta 480 aactcaaata tgtgcttcaa gatgcaagat ttttcctcat aaagagtaac aaccatgaga 540 atgtgtctct tgccaaagcg aagggtgtat ggtccacgct ccctgtaaat gagaagaaat 600 taaatcttgc atttagatct gcaaggagtg ttatcttaat attttctgtc agagagagtg 660 gaaaatttca agggtttgca agactttctt cagaatcaca tcacqqaqqa tctcctatac 720 actgggtgct tccagcagga atgagtgcta aaatgctggg aggtgtcttt aaaattgact 780 ggatttgcag gcgtgaatta cccttcacta agtcggctca tctcaccaat ccttggaatg 840 aacataaacc agtaaagatc ggacgtgatg gacaggaaat tgaacttgaa tgtqqaaccc 900 agctttgtct tctgtttccc cccgatgaaa gtattgactt gtatcaggtc attcataaaa 960 tgcgtcacaa gagaagaatg cattetcage ceegateacg aggaegteea teeegtegag 1020 aaccagtccg ggatgtggga aggcgtcgac cagaagatta tgatattcat aacagcagaa 1080 agaaaccaag gattgactat ccccctgagt ttcaccagag accagggtat ttaaaggatc 1140 cacgatacca ggaagtggac agacgatttt caggagttcg ccgagatgtg tttttaaatg 1200 ggtcctacaa tgattatgtg agggaatttc ataacatggg accaccacca ccttggcaag 1260 quatgccccc ttacccagga atggaacaac ctccacacca tccttactat cagcaccatg 1320 ctccacctcc tcaagctcat cccccttact caggacatca tccagtacca catgaagcaa 1380 gatacagaga taaacgagta catgattatg atatgagggt ggatgatttc cttcgtcgca 1440 cacaagctgt tgtcagtggc cggagaagta gaccccgtga aagagaccgg gaacgagagc 1500 gagaccgccc tagagataac agacgagaca gagagcgaga tagaggacgt gatagagaaa 1560 gagaaagaga gcgattatgt gatcgagaca gagaccgagg ggagagaggt cgatatagaa 1620 gataatgggc ttttggaagc actgattgtt taaagataca aaaaatcttg tattttttt 1680 ttgggggggt ttacaagtag taaatttatt ttcagctgtc tgcctatgaa gttcattgtg 1740 tagaaggatt tattatgacc ccctttgttc caagcatgca gtatcataag aactggaaaa 1800 actcaaatcc gccaaaaatc cacagctgac agttgaattg acacttttat tggggcagaa 1860 tggaacagtc caagaatgta gatactgatt ctttctccat aaatgttctt atagtgtgtt 1920 catcctagag ttatttttt gtttgttttt ttcctttttg gatcttgatt gataactgcc 1980 atgatatttt gctttgatgt gtttctacat gtagttgcac acggttcagt aaaaataatg 2040 ctgctatcga gtatgcaaat attgaagtat gatggtttga ctgtatggca gtgttgtagc 2100 agcctcttgt ttttttcccc attgcctctt tttttaaaaa acttataaag tcactttta 2160 titttcctca gtcttcaatg acgagagcaa tattaagaag acattgctat ctaatttta 2220 atctttttaa atgaaaaatt cctatgttca gtagcgtggt tgatgctatt gtttagcctt 2280 cccctccaaa ttgtatacat tggcttggaa tgttcacaac ttgcgtgcgt ggcagcggaa 2340 gacgattccc atattctaca ttgctactgt tttgtataaa ataaattggt aaagattgac 2400 ggttaaaaaa aaaa 2414

```
<210> 5470
     <211> 421
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (5)...(303)
     <223> similar to gillo9915 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5470
ggccgatgac tgtaccccc tgaaaaccat caccaaattt tataaccacc ccttgcactt
                                                                       60
tgttttcaat gacaccaagt tggacgctat gctggaagaa tttaagaaag gtaaatctca
                                                                      120
cctggctatc gtgcagcggg taaacaatga gggagaaggg gatccatttt atgaagttct
                                                                      180
gggaatcgtc accttagaag atgtgattga agaaatcatc aaatctgaga ttcttgatga
                                                                      240
aacagattta tacactgaca acagaacgaa aaagaaagtg gctcaccggg aacgaaagca
                                                                      300
agatttttct gcctttaagc agacagacag tgagatgaag gttaaaatat caccacagct
                                                                      360
cctcctgggc catgcaccgt ttcctaggca acagaagtag aagcatttag cccatcccag
                                                                      420
                                                                      421
     <210> 5471
     <211> 1139
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (28)...(912)
     <223> similar to gi4240305 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5471
actcttacgt caagctaagg acgcggcacg cagcgcttta ttgatgatgt cgtttctgct
                                                                       60
gtcctgttgt ccagctatgg ccagtcagca gcgatgcccg gctttgcagg agccatgtca
                                                                      120
ctagccgggg cccaaggcag cctgtggtct gtggaaggag gcaataagct ggtttgttcc
                                                                      180
ggtttgctga agctcaccaa ggccaatgtg atccatgcca cagtgacctc tgtgaccctg
                                                                      240
cacagcacag aggggaaagc cctgtaccag gtggcgtatg agaatgaggt aggcaacagc
                                                                      300
tctgacttct atgacatcgt ggtcatcgcc accccctgc acctggacaa cagcagcagc
                                                                      360
aacttaacct ttgcaggctt ccacccgccc attgatgacg tgcagggctc tttccagccc
                                                                      420
accgtcgtct ccttggtcca cggctacctc aactcgtcct acttcggttt cccagaccct
                                                                      480
aagettttee cetttgeeaa cateettace acagatttee ecagettett etgeactetg
                                                                      540
gacaacatct gccctgtcaa catctctgcc agcttccggc gaaagcagcc ccaggaggca
                                                                      600
gctgtttggc gagtccagtc ccccaagccc ctctttcgga cccagctaaa gaccctgttc
                                                                      660
cgttcctatt actcagtgca gacagctgag tggcaggccc atcccctcta tggctcccgc
                                                                      720
```

```
cccacgetcecgaggtttgeactccatgaecagetettetacctcaatgecctggagtg780gcggccagetccgtggaggtgatggccgtggctgccaagaatgtggcettgctggcttae840aaccgctggtaccaggacetagacaagattgatcaaaaagatttgatgeacaaggtcaag900actgaactgtgagggctetagggaageetgggaacttteatccccactgaagatggat960catcccacagcagcccaggactgaataagecatgetegeecaccaggettctttctgace1020cctcatgtatcaagcatetecaggtgacetactgtctgeetatattaagggtccacacgg1080cggctgctgettttttttaagggggaaagtaagaaaagagaaggaaatceaagccagta1139
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```
<210> 5472
<211> 1786
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1782)...(1562)
<223> similar to gi511965 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5472 ttttttttt ttgaaaatga acaaaataaa gctttatttg aactccctcc cctacagatc 60 attcagatgc ccgggaccat gtccaggttc ctctcagcaa catggaaagc taagccattt 120 cacaaacgca caactgtagc tacactacag ccccccatgc ccagggcaca gctttgttgc 180 taagcctgta acaaaagacc accactcagt atttgtgtac cctgcagcca acaccacctc 240 ctgggcttca caggttcact cacccaagag gccagcacaa ccacgaccga gtgggtactc 300 agtggcccag acacccccg aacactggca ctgccacaag gccctgaagg gtagactgtg 360 gggcaaagag gacaaactct ccctccccta agggacccgg ctcactgggc ctccttcccc 420 tgccaaccgc cagcccctgc atgcctagca gggaggtaag cacccactgg cgtcgtgatt 480 tccattatct tgctaatgtt gacagcacct aagtcacatt aaaacaaaga gagactggat 540 ccagacctcc aagtctcatc attggacctc agtggttctc actgccccaa ccacagagtg 600 aaggtcaggc agcgtttgcc aggatttggc tctgaccaag ttagtgctct aacaagtcac 660 ctgagtttct aatagcttcc ctgaagaacc caactatttg gagtatgttg cctctcctat 720 caagaggcat ctgggggcac aaaaatcttt ctggatcaca gcttgaagaa acagaacata 780 actggagtag cttcagaact aaggcggcca cattcacccc accgcttagg agttagctcc 840 attatacaca accaagcaca ggagaaacac tcaccaggaa aagatgccgg aggcttggaa 900 gttctcaagg gaactgttta gacagaggta caaacatctc caattcagac ttccaaatac 960 actaacaata attaaaaatg tggcctctga tcctcatgtt tcctcaccag tagaggcaaa 1020 aaaggagatt ttcataacta catgttaaaa agaacatgtt caagtaaatc cacacactac 1080 atgtgagtgt tgcatgctgt tcttccacaa tataaaagta taaaaataag atttctgacc 1140 tttgtatcta gacagatctg gagaaaacac ggttgctact agctaactag ctctgtgtta 1200 tetgageagg egegetatee eagggeetea cetteetgtg etggeteaag agggeagagg 1260 aatggagatg gcaatgcctt ttcattccag gaaaccaaac tcagatggca gaaccagccc 1320 tagccatgtc gcatagcctc tccatgggtg acactcctgg gacctccaat ggatgggaga 1380 aagggctctc agcccagctt cacgtgaggg cggtgtgggt catgtgtggg gtgggggctg 1440 cttctgggac gtaggaagac gccaacctca ggggtacctt ctgggaagga caagccaggg 1500 cttgggtgcc cgcccatccc aagagcccca caaggtgcca gctcacttag cagcagcctg 1560 cttgtccttg cacttctggt agacactcag gatctctgcg atgatgctgg ggtcctccaa 1620 ggtggtagtg tctcccagct cctgggcctc actagtgatg atcttcctca ggagccgccg 1680 catgacette ceagacetgg tttttggaag acgttteace accaggatet cateaggeae 1740 agcatatttg gcgatcttgg tggccaccat ggacttgagc tgcacc 1786

```
<210> 5473
     <211> 641
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (643)...(290)
     <223> similar to gi3451335 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5473
attacgccaa gcttggcacg aggctactgc cctcactgga cttggggggt ctggaccttt
                                                                    60
ggcccctgcc ccctggggga cccagacctc tgggccctca cttctggccc ttacagagat
                                                                    120
ccaggcatcc aacaccccca tccctgccca agcgtctgag gtgttagtgg tgggggggaga
                                                                   180
agcccaccat cccagactct ggtaaatgtc tttgctggtt ccttgcagct ggcagtgggg
                                                                   240
300
cctctttcct cttgtgtccg tcgctgccat tgaggaaggc ttctcttgct tctccctgtt
                                                                    360
catccaagec actggetteg tgggteagat aggaaceett etgeegtace gageaceaga
                                                                    420
ccatgcccac tagcacacat atgatcagaa acaccagcag cgccaggatg ccqcccacaa
                                                                    480
tggcataggg aaccgacgtc tgagcctcta ccaccgcacc agggtcgtag accacaagta
                                                                    540
cgtagagcgc cctcgcatgg ccgtgcttat tggacgcctc gcaagtgtag gtgccgttat
                                                                    600
ccgcggatac cagacccggg agcgtgagcc gctctcccac g
                                                                    641
    <210> 5474
    <211> 485
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (33)...(212)
    <223> similar to gi4469185 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5474
gaagcatcat cacgccaagc ttggcacgag gcgactgtga gcagagcccc acatcctcgc
                                                                    60
geaegtette cetgggetet ggeggeeeeg aetgegeeat cacaqteaag ageeetggga
                                                                   120
gggagccggg gcgtgaccac ctcaacgggg tggccatgaa tgtgcgcact gggagcgccc
                                                                   180
aggccgatgg ctccgactct gagaaaccgt gaggcaagcc cgtcacccca cacaggctgc
                                                                   240
ggcatcaccc tcagaccttg gagcccaagg ggccactgcc cttgaagtgg agtgggccca
                                                                   300
gagtgtggcg gtccccatgg tggcagcccc ccgactgatc atccagacac aaaggtcttg
```

```
gttctcccag gagctcaggg cctgtcagac ctggtgacaa gtgccaaagg ccacaggcat 420 gagggaggcg tggaccactg ggccagcacc gctgagtcct aagactgcag tcaaagccag 480 aactg
```

```
<210> 5475
<211> 1281
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(482)
<223> similar to gi4589566 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5475
tggaaagacc tttagccgtg gttatcatct tattctccat cacagaattc atactggtga
                                                                       60
aaaaccttac gaatgtaagg aatgctggaa agcctttagt cgctactcac aacttatttc
                                                                      120
acatcagagt attcatattg gtgttaagcc ctatgactgt aaggaatgcg ggaaggcctt
                                                                      180
cagactactt tcacaactca cacagcatca gagtattcat attggtgaga aaccttataa
                                                                      240
atgtaaggaa tgtggcaagg cctttagatt gcgccaaaaa cttactctac atcagagcat
                                                                      300
tcatactggc gaaaaaccct ttgagtgtaa ggaatgtagg aaggccttta gacttaattc
                                                                      360
atcccttatt caacatctga gaattcattc tggtgagaaa ccctatgaat gtaaggaatg
                                                                      420
taagaaggcc tttaggcaac attcacacct tactcatcat ctgaaaattc ataatgtaaa
                                                                      480
aatctaagaa agtcttttca acttctgtgt tatagaacat tctatgaatg tagtaattaa
                                                                      540
tctattttgc tccatacatg caactgcgtt ggcattagag gttttatacc attaaaagag
                                                                      600
tgtgacaatg tattgtagtc catcatcact caaacctgaa acttcagcat atttgttcta
                                                                      660
aaaactaatc ctgttataag aatgagaaag acatttaccg tcatccctat cccatcactt
                                                                      720
tgtgtcatac tggacaagac gcttaactgc tctgtgctat aattttttaa tttatgacat
                                                                      780
ggtcatataa gagtgcagca gtttgacaca ctttcaatca agaggtggaa ccctacatcc
                                                                      840
ctctgttgta tacaggaatc tacatccctc tgtgaactct tggccccagt agaatatggt
                                                                      900
agacgtaact getgtgetgg tttettgaet eagaetttae tggtagggtt aetteacete
                                                                      960
atggaaatga cagaactgtc ttggttacaa agtctggcta ctttgctgaa gagaccacat
                                                                     1020
gaagaggccc tgaaaactac gtagagaggg agaggcacct gctgaaccct gtcttcttga
                                                                     1080
catccaccaa gataccagac atttgagtga aattttggat ccaccagacc agccaccagc
                                                                     1140
taaatgccag tgagcgactt ggtaacctga actgatgcca tgtagaatgg aagaattgac
                                                                     1200
cagctgagcc cctggcccaa atttctgacc cacaaaaaca tgagatataa taaaatggtt
                                                                     1260
gttgttttaa gccactaaaa a
                                                                     1281
```

```
<210> 5476
<211> 1638
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1)...(298) <223> similar to gi4091819 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5476
cgctgggagg gtacccgctt ctcggaggtg caggccctgc cctcccgggg ctcgctggcc
                                                                       60
ctgcagccct tccttgtggg tggccgccgc tacctggcac tgggcagtga tttctccttc
                                                                      120
acccagatct accagtggga tgagggacga cagaagtttg tacggttcca ggagctggct
                                                                      180
gtgcaggctc ctcgggcctt ctgctacatg cctgctgggg acgcccagct actcctggcc
                                                                      240
cccagcttca agggacagac gctggtgtat agacacattg tggtggatct caqtqcctag
                                                                      300
qqqgtgccga ggcctctggt ctcctcaggg tggccactgg aggatgggtg ggggcctctg
                                                                      360
tgagcaccac gtatgcctgt gtgaagacaa gcgaccaacc tgcattcatg cccttgtatc
                                                                      420
cgcacacgcc cagtgtgtac aggcgcaccc cgtggactgg cccaggagga cgtgcatcat
                                                                      480
cactgcaatc agcatgaaca ccaggcaccc ctgggacacc taacgcccag ttcccgtgac
                                                                      540
cccaactgca ggcccccct actctgcagc ctttcccatg ctctgccccc tgtctcatgc
                                                                      600
acgagtggtg cggggtgctg ggagcgaggg gggccqcatc ctcctgtcct tgtgcttctc
                                                                      660
cttctgcccc tctggtcttt cctgttggtg ctccaggcat tgtttacctg ctcttgctcc
                                                                     720
ccgctgtagc ccacagccat atctgtcatg cttccccggg gccactcacc cctgcccac
                                                                     780
cccgtctgca tgctcacatg gacgcggacg gacacactca ttacacactc acacgccccg
                                                                     840
actgcacccg gtgtccatct ataaacatgt cagggcacgt gtgcatacaa gcagattcag
                                                                     900
cactgcctac caggetetee tgttacettg cetetetet tggaggggge eceetetget
                                                                     960
caccccage gtgcccccc eggaactgat aaggatgaga atggtggtge cagettetga
                                                                    1020
gggcctgctt ggcctcctgg gggcaaagcc cctctgcccg aagcaataac aacagcagca
                                                                    1080
gaagcaatcc cggggagctg ccaggggtgt ctgtctctgt tctccttggc gtttccttca
                                                                    1140
tggccgtgaa tcccagctca cccatggaca gaagacctcc cctcatctga aagcctttct
                                                                    1200
gccttccttc ctgtagctgt cgctttctca ggcttggact gtcccctggt tcaccctgtc
                                                                    1260
tttgggatgt ggcccttgag ctgggcgggc tccttgggtg gattagagag ctggccgagc
                                                                    1320
tgcaagcacc tgagttacct gcgagggtgc ccagagtgga gcttggcctg agggcgtgtt
                                                                    1380
gcagccctgg ccccaccagt ccacagaggc ccccaggagc actgcctttc agtggaccgg
                                                                    1440
gtgggggctg gtgggagggg ccccactagc tgagcttctg ctgccctctg ctgtctgctg
                                                                    1500
agatgccagg ctagtggaga gggcacacca tgtgcccaaa tggtgtgatg ctccttgtag
                                                                    1560
caggatacca gggtactggg gggcaatgct atgattaact tgcttcaaat aaaaaqttcc
                                                                    1620
cgccccataa aaaaaaaa
                                                                    1638
```

```
<210> 5477
<211> 3042
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(3043)
<223> similar to gi5689549 in the genepept database release 114;
 Run with FASTXY 3.3t00, default parameters
```

<400> 5477 catcaaatga attgtcacaa tactcgaata atgcaagaca cagaaaagga tgataacaat 60

	atgacaatta					120
	atgcagccta					180
aatagtctgg	aagacgatag	tgacaaaaac	gaaaacctgg	gtcggaaaag	tgagttgagt	240
ttagacttag	acagtgatgt	tgttagagaa	acagtggact	cccttaaact	attagcccaa	300
ggacacggtg	ttgtgctctc	agaaaacatg	aatgacagaa	attatgcaga	cagcatgtcg	360
	gtagaaatat					420
	tggtggagga					480
	gcttcgacct					540
ccgcagcaga	acatgaacat	ccgtcagcat	gtccggccag	aagaggactt	cccaggaagg	600
acgccggaca	gaaactactc	ggacatgctg	aacctcatgc	ggctggagga	gcagttgagc	660
ccccggtcga	gagtgtttgc	cagctgtgcg	aaggaggatg	ggtgtcatga	gcgggacgac	720
gataccacct	ctgtgaactc	ggacaggtct	gaagaggtgt	tcgacatgac	caaggggaac	780
ctgaccctgc	tggagaaagc	catcgctttg	gaaacggaaa	gagcaaaggc	catgagggag	840
aagatggcca	tggaagctgg	gaggaggac	aatatgaggt	catatgagga	ccagtctccg	900
agacaacttt	ccggggagga	cagaaagcct	aaatccagtg	acagccatgt	caaaaagcca	960
tactatgatc	cctcaagaac	agaaaagaaa	gagagcaagt	gtccaacccc	cgggtgtgat	1020
ggaaccggcc	acgtaactgg	gctgtaccca	catcaccgca	gcctgtccgg	atgcccgcac	1080
aaagataggg	tccctccaga	aatccttgcc	atgcatgaaa	gtgtcctcaa	gtgccccact	1140
ccgggctgca	cggggcgcgg	gcatgtcaac	agcaacagga	actcccaccg	aagcctctcc	1200
ggatgcccga	tcgctgcagc	agagaaactg	gccaaggcac	aggaaaagca	ccagagctgc	1260
gacgtgtcca	agtccagcca	ggcctcggac	cgcgtgctca	ggccaatgtg	ctttgtgaag	1320
cagctggaga	ttcctcagta	tggctacaga	aacaatgtcc	ccacaactac	gccgcgttcc	1380
aacctggcca	aggagctcga	gaaatattcc	aagacctcgt	ttgaatacaa	cagttacgac	1440
aaccatactt	atggcaagcg	agccatagct	cccaaggtgc	aaaccaggga	tatatccccc	1500
aaaggatatg	atgatgcgaa	gcggtactgc	aaggacccca	gccccagcag	cagcagcacc	1560
	cgcccagcag					1620
	gcaagagcag					1680
	tcctcaacct					1740
	acctgtgcgc					1800
ctggacctca	gcatgaacaa	gcagaggccg	cgggacagct	gctgccccat	cctgacccct	1860
ctggagccca	tgtcccccca	gcaacaggca	gtgatgaaca	accggtgttt	ccagctgggc	1920
gagggcgact	gctgggactt	gcccgtagac	tacaccaaaa	tgaaaccccg	gaggatagac	1980
gaggacgagt	ccaaagacat	tactccagaa	gacttggacc	cattccagga	ggctctagaa	2040
gaaagacggt	atcccgggga	ggtgaccatc	ccaagtccca	aacccaagta	ccctcagtgc	2100
aaggagagca	aaaaggactt	aataactctg	tctggctgcc	ccctggcgga	caaaagcatt	2160
	tggccaccag					2220
	tcaccggcaa					2280
	gtatcaggat					2340
aggtgtccgg	tccccgggtg	cgacggccag	ggccacatca	ctgggaagta	cgcgtcccat	2400
cgcagcgcct	ccgggtgccc	cttggcggcc	aagaggcaga	aagacgggta	cctgaatggc	2460
tcccagttct	cctggaagtc	ggtcaagacg	gaaggcatgt	cctgccccac	gccagggtgc	2520
	gccacgtcag					2580
	cagcgatgaa					2640
	gcaacggtat					2700
	atgaatccaa					2760
attaccacga	tggagagcaa	cctgaagacc	atcgaagagg	agaacaaagt	gattgagcag	2820
	ctctcctcca					2880
gctaacatcc	agctgccgca	catggatcca	atcaatgaac	aaaattttga	tgcttacqtq	2940
actactttga	cggaaatgta	tacaaatcaa	gatcgttatc	agagtccaga	aaataaaqcc	3000
	atataaagca				•	3042
· -	-					

<210> 5478 <211> 2048

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (367)...(807)
<223> similar to gi3417289 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5478 ctacgatcat tccgccaagc ttggcacgag gccgtaggcg ctcccgggcg ctggcggcg 60 cggaggagag ggagcagcgt cacgggcgcc cggcccgtta aaacgctqct qqctqqaqcc 120 acctccctcc ctgcagcccg caacgggaat ggagtaaagg gagacccgtc gacctggcca 180 cggggatcag cgatggaatt aaagcaatct ttgtccaccc atctggaagc cgagaagcct 240 ctgaggcgct atggggcggt ggaggagacg gcttggaaaa cggagagact ggggagaaat 300 cagctggaca tcatctccat ggcggagaca accatgatgc cagaggagat tgagctggag 360 atggcaaaaa ttcagcgtct ccgggaagtc ttggtccgcc gggagtctga gctcaggttc 420 atgatggatg acatccagct ctgcaaggac atcatggact tgaagcagga gctgcagaac 480 ttggtcgcca tcccagaaaa agaaaaacc aaactgcaga agcagagaga ggatgagcta 540 atccagaaga tccacaaact ggtgcagaag agagacttcc tggtggacga tgcggaggtc 600 gagcggttaa gggagcaaga agaagacaag gaaatggctg atttcctgag aatcaagtta 660 aaacctctag acaaagtaac caaatctcca gccagctccc gggcagagaa gaaagcagag 720 ccccaccta gcaagcccac ggtggccaag acggggctgg cactgatcaa ggattgttgc 780 ggggccaccc agtgcaacat catgtagccc ccacgtgggg tgccctgggc catggggacc 840 ccccccacc ctcttgtctt tatagccccc atttcaccgg ggcccaagag ctctccaagg 900 cagaaggggt tgaaggcaag cccgtgactg tcaccagagg ccatqqqcac qqcaqqcqqq 960 cctggccacc ctgtacagag tgtagcagta gggagtctct caccgtcgca tggtcctccc 1020 cagagcatgc cgaacccagg agtctgtctc actgtttatc caaacaccag gaaaggtcct 1080 ccctcaaaaa agcatatctc cacttctctc tagctgtatc taacccaccg tgtgaatgaa 1140 ctgggagagg ggcatgctcc ccagctgtgt gtagtcgtga cttctcaaca atctagcacc 1200 atgtcggaca cgttccccat ccaccctcct agctctgctc tcagagctag gcacatgggc 1260 acaggtcccc tcccgtctgt cctctcccag caactgtgcc ctggagggct ccacatggcc 1320 cccgtgtctc tcgggcacca cccatatagc agtcccagag ggcccatctg taaaqatcga 1380 gcttgtgtgt ggtgtcgtgg tcacatctcc cgcttccccc catcctgtgt ctgggcacaq 1440 ttcacatcag gacagcgtcc attgtgctct cagtctgcct caggtgtgtg cctggagggg 1500 gcctggactg gcatggatcc agtgtgcaga agagccagca gggaaccgga agctctgatg 1560 tcaaggccag agcagttgag aatgggaccc agagtagatg ctgacctggg cactccacca 1620 ttccggggcc accacagaga tgccagcagg atgccacttt gccagcccga cacacggacc 1680 tttgtaaaga acagcaacag gcaggagagg cagcgtgtga ccagattgtg tcccqtcatt 1740 gggtggcata tgttaactag ctgccaaaca acttcaaccc gtgtaattca tgtacatttg 1800 caacagccag cccggtacag cctgtgtgac ttctctgtat gtgtgtgtgt gtcgtgacca 1860 gcctaagtag ttagcataac tcaagatgct gatgtgcagt cacccatcag agaaaataaa 1920 aatggaaacc acgttcacag cattttaaaa gtttttactt tttttcttga ttatggaagt 1980 aatccatgta catagtaaat cattttaaaa gtacaaaaag tatgaagaag tttqtcttaa 2040 aaaaaaa 2048

```
<210> 5479
```

<sup>&</sup>lt;211> 1465

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (12)...(1402)
     <223> similar to gi3510639 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5479
ggatagagcg cattgaagac accagacctg ctggatgtgc agagcagcta gttcacaata
                                                                       60
acctcccaac caccagtgtc atcatgtgct ttgtggatga agtgtggtcc actctcctga
                                                                      120
gatctgttca cagtgtcatc aatcgctctc ctccacacct catcaaggag attctgctgg
                                                                      180
tagatgactt cagcaccaaa gactatctaa aagataattt ggataaatac atgtcccagt
                                                                      240
ttccaaaagt tcggattctt cgcctcaaag agagacatgg cttaataagg gccaggctgg
                                                                      300
caggagcaca gaatgcaaca ggtgatgtgt tgacattttt agattctcat gtggaatgta
                                                                      360
acqttggttg gttggaacct cttctggaaa gagtttattt aagtagaaag aaagtggcct
                                                                      420
gtccagtaat cgaagtcatc aatgataagg atatgagtta catgacagtg gataactttc
                                                                      480
aaagaggcat ctttgtgtgg cccatgaact ttggttggag aacaattcct ccagatgtca
                                                                      540
ttqcaaaaaa cagaattaaa gaaactgata caataaggtg ccctgtcatg gctggtggat
                                                                      600
tgttttctat tgacaaaagt tacttttttg aacttggaac atacgaccct ggccttgatg
                                                                      660
tttggggtgg ggaaaatatg gagctctcat tcaaggtgtg gatgtgtggt ggtgaaattg
                                                                      720
agatcattcc ctgctcccga gtgggccata tattcagaaa tgacaatcca tattccttcc
                                                                      780
ccaaagaccg gatgaagaca gtggagcgga acttggtgcg ggttgccgag gtctggctgg
                                                                      840
atgagtataa ggagctgttc tatggccatg gagaccacct catcgaccaa gggctagatg
                                                                      900
ttggcaacct cacccagcaa agggagctgc gaaagaaact gaagtgcaaa agtttcaaat
                                                                      960
ggtacttgga gaatgtettt eetgaettaa gggeteeeat tgtgagaget agtggtgtge
                                                                     1020
ttattaatgt ggctttgggt aaatgcattt ccattgaaaa cactacagtc attctggaag
                                                                     1080
actgcgatgg gagcaaagag cttcaacaat ttaattacac ctggttaaga cttattaaat
                                                                     1140
gtggagaatg gtgtatagcc cccatccctg ataaaggagc cgtaaggctg cacccttgtg
                                                                     1200
ataacagaaa caaagggcta aaatggctgc ataaatcaac atcagtcttt catccagaac
                                                                     1260
tggtgaatca cattgttttt gaaaacaatc agcaattatt atgcttggaa ggaaattttt
                                                                     1320
ctcaaaagat cctgaaagta gctgcctgtg acccagtgaa gccatatcaa aagtggaaat
                                                                     1380
ttgaaaaata ttatgaagcc tgaagtgtaa ctgatgtttt tatatagtaa acccattaaa
                                                                     1440
tactgtgaaa ataaccctga aaaaa
                                                                     1465
    <210> 5480
    <211> 405
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (127)...(214)
    <223> similar to gi1172146 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5480
```

<210> 5481

```
ggtccacctc ttacccgttg atgtgctctg tgctcacgac acaaagctcc tggctggttc 120 tcttcagaga caggacagga acgagagcca ggctctggtc cggccgtgtg cgagttcttc 180 agcgttgccc tccacatctg gagtaacata ttggtaggtg tgttttgatg aaggaaacat 240 gactccaccc tctcccattg gccttcccag ggaagtagca gaaatctaag aaggtcaggg 300 ggaggagcta acttcagcta gaagtctcat tatcagccag gaggattgat gaccaaatag 360 aaaaaaagtaa tttttaaaag gctttatttc cctgcccatc tcttc 405
```

```
<211> 6845
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (6595)...(5150)
<223> similar to gi2337952 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5481 acqaataaag cacacaactt tattcacgaa gttgtgagta tgacagtgat gcagagtata 60 tgacaaagga gtgcagtgag tgctgctggc aacaggagcg gggagcaggt agggatcaca 120 ggcacagcag cgcggagccg gcagggccac ctcctcctct acacacaagc atgtggcact 180 tagcgcgcca acacacacct gctcagtttc acagggaaca cgacacagct tttcaaaagg 240 aattottota aacatttgot ttoatattto caaaagggga gggagggcag gaagaaccac 300 acgccttcca acatttgaaa aaattccata aacccaactt aaaatcaaag aactcagaga 360 getteaatge ggagteatea geaactegea ggaaceaeae acatgattgg acaagtetgt 420 acataaaacc ccaaaagaac atcagttttg tggacaatgg tttcctctgc tgtaaagaaa 480 cgtatgcata tatgatcagt aagcagctca catctttctg aatgtcaagg tctacaggat 540 tgtctctgtc cacctttggt caatgggttc aggaagtgac tcatgggaac tgcactctta 600 ggagaaacac ttttgggaat aattttattg aataacaacc accactcaat tacactaagc 660 ttcagaaatt gttggatttg tttaattttg ctgtgtacct atacattgtt tagaaagttt 720 cttttggctt aaactgacca tttcccccct tctttttgag ttttccatga ttaaacttgc 780 ccaaataaaa acataacaat ccatatgcaa agcatatctg ccaccacctc ccactgcttc 840 ctgggccgca aacagaaaaa taaacagtga ttaaaaaaaa tgccaaagtg aaggtttctc 900 tttcttctat cacaacatag ttgggtagtt cccttaaagt acatcattgc tataagttgg 960 tatcactgca aatctcaagt cccaaataat ctctttttct ggatagaaag ttattcaaaa 1020 gggagcacaa aagagcaagc tttggggcat actgacaaac acttcattgg ttagaagaga 1080 ataattttaa aaatcaaata aaattgaggc tggcatagga agtacagatt aaatacaggt 1140 taaatagcta ccagaaacac agaagaggtg gttaataaaa actgagattg cttcagagga 1200 cacaggaggg ttgatgagac agtctatttt ccttccacca tcttccatga gagtcaggaa 1260 aaggqttctg tgagcaccca acctggagcg gtcacctgtc tcttccatac acaggaggat 1320 gctaagaccc agttagcttt aaatggtttt tagaaagact tacctagtca aaagtggtta 1380 atttgaactt ttcaaacttg caaaagcata tacatttgat atcatcatct gagaagcaat 1440 tcttagaaaa aaatgtttgc ttcaatgtct aaagaaatcc agtgaaagtt ttagaaacat 1500 1560 tgccagctag acgtctccga gttagagttg attgatatac tggattggga tggagaggat gagaactgaa aaagaactgc tccaqcctct qcctcaqaaq aqqaaactca qcttqqaqat 1620 gacagaattg ggtagcggag tagatgctag agcccatgac agatagaaaa ctacccccat 1680 ttaaaaaaaa acaacaactc attaactcta tctctttgag gttttggaga acaggaagtt 1740 tatgtgaagt tattgaacac gtcatattaa gaacatttca taactaaccc caaaccaaaa 1800 tgtagatgca tagctagctg tgcaagtttc ccaatqctct tcctatctcc taataagtca 1860

cacagaaaga ctatgtgata gcctggattt tcttgaagaa attttaaaag aactgatttt 1920 cctatcatca ttgaggcccc ttttacttca tgccatcagt atgcacttaa gagtcccaag 1980 gaagtcaaat gttcccaaat gtagcccttt acatcggcac cagggaagcc tgccatatat 2040 acaatcccct tcctagggtg aacaagctcc accagtttga gtgtgttaat aactggaatt 2100 ttcatgtata gtacagggta gggtaaaagc agaccaatag ccatcttgtg tgctgtgacc 2160 aggatggaca ttttgaggac aagcatgctg agcccagttt aactaaatgc gcaggcattc 2220 tagcccacac attcaatctg gcagttagca ggaaccaggt tgccccacaa cccatccctc 2280 cagctggagc cttttgctgg gaaatggagt agggggccca ctctgcatta tggtttccaa 2340 tgacccctcc ccagagcaga gcactactct gcttgcagat aggaggctac tggtgctttc 2400 tggcaatgca tttctgcaag gtgcagttta aatgaactca tatggtactt gatatggaaa 2460 gaagcttttt ttcttctcaa gttggatgca gaactgagtt taaaagatac aaggaaagca 2520 gggtttcatt agtgggagct gatttagggt tcagttcttt atcactgcaa tcttaggcag 2580 gccccttaac tcctagtctc tataaaataa ggaaggggt tgtcccagtt ttcagtctaa 2640 tgtccccatt ctatgacaga cccatgtctt ctttatgtag accaaggaag aggaatttta 2700 gcaaaactac ctgattatgc ccatgtttcc caaatacctt gatttttctt atattgacat 2760 ttcatctgca catgtctggg tgataattca ttaatcaatg taaaacgtag ggacccttta 2820 ttagctccat aatgaaaaaa atctctccac cagccaagtg ctgggaccca ggtggccacc 2880 attgttattg acaggtaagg aagcactgga aatgcaccat cctctccatc cccacacttt 2940 ccagagtaaa gcaaggatga ggacacccag gcattgtgcc aaggctgcca ttgcaggagg 3000 gcacagagag aggatgggat agaaaaagca tggaataagc aagaggccac tgagacacca 3060 aaggctaaac tgcaaactgc agtgtggctt ccaaccaagc aagagctggt ctcatctgct 3120 catggccacc ctgtcagagc catttgctaa acatgttagt agatccaaca cacacaca 3180 cacacacaca cacacacaca cacacagagag tagtcctcat tcagtgcata 3240 gcaatggaag gctaggacaa tttagattcc ttaggtaaga gcacaggagg atgctataga 3300 acagtgactg ttcattccac cccccaaatg acagcagtga gccacgtgtc agaggctgca 3360 acacagactc agaaactatt ctacttgctt ttttaccact ggtgtcagag agacagcttg 3420 taatcctaat atttggtgcc agcaggaaga acttcagagc ttttgttctt agtggcatat 3480 gaaggtaaat tcaaatgttt tcttcttcgg ctttaaaaca gagcttaaat tcttaagcac 3540 agccccaaag catgataata aagtggctta ccctcctggg tgtggagtta cacaaactct 3600 ccctcatcta actcacgtcg ggaatcatga tgtggtttca tatgcacgca cgtgttgggg 3660 aaaccctagg ctcatattcg aatctagtgt tgcagagcct gagggactct cgtgagatgc 3720 tctgacctcc acatcccacc tcatccttcc tctgtggttc ccagtctgat ccttccatga 3780 gctacatcag cgccaacacc tttccatgaa ggaagtgatg ttggggtcgc agtttagcct 3840 cactettgat etttgagtea cacacateg gtgacaatgt etttagaage tgcaacacag 3900 caggacaaac attcaagcag aaattaaaaa gcacatgcat gctcacaaaa ttactctggg 3960 tgagtgaaac caacatgtgc acacaccc atgaattcga cagagctggg caagaagaaa 4020 gctgaaaagg ccaaattaaa tacgttcgaa ggagtctact ttggagttgc agagatttaa 4080 aagagaaaaa catgtettte ettageetat tattgaaaga aacettaaaa accaacaaca 4140 gcatgggctt gatctgattc ataggatgcc agagagacag cagaggataa cgactggaag 4200 aactagagtc agtaggacat gggacttgtt tttgtttttt gctttttggt tttttttggc 4260 catgaatgat atggccccta cacaaaatca cctaatggca tgccactggg ccaatctggg 4320 ggcaatttgt gtttttcctt tctttgcaaa ggtggagctc cagacagctc ctgtcctagg 4380 cggggagcag gaaccagacc tgctatggga agcagaaaga gttaagggaa ggtttccttt 4440 cattcctgtt ccttctcttt tgcttttgaa cagtttttaa atatactaat agctaagtca 4500 tttgccagcc aggtcccggt gaacagtaga gaacaaggag cttgctaaga attaattttg 4560 ctgtttttca ccccattcaa acagagctgc cctgttccct gatggagttc cattcctgcc 4620 agggcacggc tgagtaacac gaagccattc aagaaaggcg ggtgtgaaat cactgccacc 4680 ccatggacag acccctcact cttccttctt agccgcagcg ctacataata aatatattta 4740 tactttgaaa ttatgataac cgatttttcc catgcggcat cctaagggca cttgccagct 4800 cttatccgga cagtcagcac tgttgttgga taagagataa aggaaaagaa aaagaagaaa 4860 acaacgcagc tcctgttgta tacataaggt aatgtgaaaa ggtcacatgt ggacactact 4920 ctgtgtttcg gaacatagaa atttctacgc catgcttctt ggcaagtgtt actgttggct 4980 ggcccgacat ttgactcatg gtgttttaac cagactttct ctttttggtg ttgctgagcg 5040 acggtagttt gcaaattctc caatcaagtt tgggcctcaa tatgacatcc tatggggcac 5100 cgccactggt cagtcctttc tctaattggc cattcacgag tgggacttag aagagttttg 5160 cttttttctt catgtcgttg cgtctccaaa gaggtaacct gtcaaactcc tgtatggaca 5220 ttccaaagat ttcccgaaac acttcagggg ctaagtggcg ctccagcctg gttctgtcca 5280

```
cctctctgag gattttgttt cgccctctgt tggtcaccat gagcatttca tatggaaata
                                                                     5340
tctttggttc caacatgttg ggcatagaca ctcctcggtc cattctcatt gcaggcatgt
                                                                     5400
ggccatctgg gagtgtctgg taatctcgca ctcccccqct gacatcccca tagctgttat
                                                                     5460
actgagcgaa gtcggtagaa acaggccggt gaagcccatt tcttccatag ccagggagag
                                                                     5520
atgcagtttt agatgatgga atatgtgaag ctgagttgat gggagaatcg tagcgactgg
                                                                     5580
ctaacagaga tgacctttcc cggctctctt tctccatctc ttctttcaag atcaactgtc
                                                                     5640
ccaggcctga gttaagcttc attaattgct cttcttgaag ctgccgacgt ctcagaagtt
                                                                     5700
ceteateate tteetetetg ceactagate tgegttteat gteaggteet acgaeageaa
                                                                     5760
atgagggggg accaggccag tggtccgtct caatctttqg tqtctcqctq qqqtctqqtq
                                                                     5820
cctqggctgc tgggaacttg gaaaacttga tgatatcttc tgaggacttg ctctgggctg
                                                                     5880
ccaaggcagc atgctgtttg tagatgggtg gctttcggta aatgttgatt ccttgatctg
                                                                     5940
gaacatggaa atgtttaggg gcctgagcgt aagttggagt tagagggcgg ctgtctggcc
                                                                     6000
ggtaagggag aggggagttc cggccgctgg acggctcatt gccaggtctg tggaaatgct
                                                                     6060
ggggagagcg ggacgtggtt ggagtgtagc tgtggcggct gtacacaggg gagttgatgg
                                                                     6120
agccctggct cgtggaccga tggatcatcc gatcccgaac atcctggtac ccttctgctg
                                                                     6180
atggagtagg agacaaagtc ctcggagact ctccaaggct ctgtctctcc tgtttgtcat
                                                                     6240
catagecega agtgtagaaa ggeteatagg taataagate tggaegttea atgteataaa
                                                                     6300
ttgccttgac cttcggaatg gctgctaaat ccttqtaatc caqqatctca ttgtctactt
                                                                     6360
ttgcatagat agtatgacct ggtgagccag gaatactgga gcctggccta gaataaatac
                                                                     6420
tttccgagga tgtcctggta ggccgcagct tttcctcggt cttcgtagat tqcttacagt
                                                                     6480
cgggatgcca aacggtggag ccttgaagat acatttcctc tccttctgtg aacatctggt
                                                                     6540
tgcatctgct gcatcgtgca cagctggggt ggtaatgttt gtcacctgcc tcaggccagg
                                                                     6600
gttccttttc ttctaattct gttccttggc tgtgctgagc agagaactcc tccaggcttc
                                                                     6660
aagttcagaa cacggccaag aggctttgta gatgccagac ctcagcccga cagactgagg
                                                                     6720
ctcccacctg cctgggttac atatcaggct tctctccgaa gctcggctaa ggcaacgtgc
                                                                     6780
atccctctag agacgcactc cggaaaccag ccccgtgtgc ggcgggcagg cacgctcctc
                                                                     6840
gtgcc
                                                                     6845
```

```
<210> 5482
<211> 1477
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1478)...(496)
<223> similar to gi3880930 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5482
ttttttttt ttctattcat cttattttac tttctaagga attgatagaa atataaatgt
                                                                      60
acatatacct aaaaagtgag ctatcctaca tatgacagac cagaatttac taactccata
                                                                     120
ggttttctgg atatttcaag cacacattaa aacaattaca gagaggacat acatttatga
                                                                     180
tttatgcaaa ttaaggcaca tcaattacaa tctattttt taagttagtc agtttaaaaa
                                                                     240
tcttcactta caaaaattca aaatatgtcc aagctcaact ttttagtagg aatgttaatt
                                                                     300
tgttgggttt ggccattttc ttttttcacc ttaaaggtca aacatgaaac aatgaggaat
                                                                     360
gtaggtcttt gtaaaacaca taaatacctg tgatgttttg aatcatttgg cccttaaaaa
                                                                     420
tattgcttaa caagttaaac ccagcttaat tgtaggtaaa tgcaagtata cccaaggctg
                                                                     480
gactatttta gtctgctttt ggctgcagat tgtacttctg tggctggaaa aaatgttctt
                                                                     540
caatagcact gaccagttca ttcagttcct tcttcagctg ctcaggatca ctgttcccag
                                                                     600
```

```
gtggggcaca cagetetgea tagtaettga ttttgggete tgteecaetg gtgegeatgg
                                                                      660
tggccacgcc tccattagca aaggtgaagg tgatcatttg gctgctttta ctagtgggaa
                                                                      720
gaacagettt tttateaggt tggetateat catageeagt tgtaaggtee etaatggeag
                                                                      780
aaatttcaaa tttgccacaa gcttttggat aattattttt tccatcgtag tttctgaggt
                                                                      840
tttcaaataa tttcttaatg gtttcttgat catggcagat aaaataggaa gctttagtaa
                                                                      900
tatggtagcc atactccaca taaatggcct ttagttgctg agacaaagac aaattcttgg
                                                                      960
ttgctaggaa gctagccaac tctgcactta tgacagcggc actgactcca tctttgtcca
                                                                     1020
gaacaaaagg gcagcacatg tatccaatag cttcttcaaa tgcaaataaa acagttttcc
                                                                     1080
cctggtctat tagctgtttg gctctgtttc ccatccactt aaagccagtt aatgtttcct
                                                                     1140
caaaatgaaa accttccttt aaggcaatgg cccgcaagat tttggaggag acggtgctgg
                                                                     1200
acaacatgta cgtgtctttg agagcactgc gatcctggtt cttctctttc caaqatgtaa
                                                                     1260
aaagccacca gcccaggagg gcccccaact cattgcctga aaacaccctc cattcaccac
                                                                     1320
tgtcttgctt ttctgccaca gcaagtctat cagcatccgg gtcgttagct aaaacaattc
                                                                     1380
tggccttggt tttgtcagcc aaagcaaaag acaaagtcaa gacacctttc ccctcttcgg
                                                                     1440
gattcgggta tttcactgtt ggaaactcag gatccgg
                                                                     1477
```

```
<210> 5483
<211> 2150
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2028)...(1258)
<223> similar to gi220637 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5483 tttctggtaa ctcaaaatgt ttacttataa ttgaggttaa tttcttaact ctttatgcaa 60 tataatgtac caaatttaga agccaagtga tttctagtat gcattaagtt tatatctaga 120 aaattctttc tggaattcag tatttatttt aaaaagtgca taacaggagt aagagaggct 180 taccaaaata tttcaaaact caagtacatt ttcctcatct ccaatatttt agaacggaat 240 aaaacataaa ctgaatcaaa ttttgaaact gtctttgaca agataaaaac accaaatatc 300 tacttaaaat tcattttgaa aatacaatct cagataactc aaaccaaaag tgctgaccat 360 tggttttctc cagaatactc agttctaaat gaacaaaaat ttatatgcac ttttctagat 420 tttgagaaac atttttgttt cattagaaaa gttatttcta acaatatatt aatagagaaa 480 tagcacaatt cttattcagc gcctaaattt ttacqagcqa aaatatqaaa ttttatttt 540 atgcatagtt tatgtattga tccatggggc ttacaaatag caacacactc ttgggctgat 600 actatcgtgg attttgctta aattatgagg gcaggaaaat tttaaaatcc cacaggtcac 660 aactgaatca cattaactgg ctgatttagt aaatgaaggg caattctaaa atgcaaaata 720 aaaatggaat taaggcagct ttaaaaagaaa ataaaactca tccacccaaa atagtgctac 780 ataattcatt acttaaaaag ctctctgtgg agtatagaca taaagccaaa aataaaaaca 840 aacattgcag ttgtgatgca gcatcaggtg cttttacttc agtgaatgaa aaataatggt 900 cacaactcaa atgaatggga atttaatatg aatatatgca ccttaccaga gatgtttgct 960 accaatgata tottagcaat tocatattoo ttacaaagto agtataattg ttgtaaaaaa 1020 atcaactgtg gttctgaata cccattcaca gttgacctca acaatgtatc tgatgtagga 1080 gactgagtat ccgtgacagg cagaagcatg tgatggtcct cagtcccaag tggaagagct 1140 aatggtaaag tcatatcaga aggcttcaca tccatagttt ctgataaagg acttttttgt 1200 atggaateet gtteacteaa agtatgatee tetgeactgg agtetagagt tttatetgea 1260 ccagaatgga cttttgtttt gtgcttcttt aaatttttaa tatctgtgta agaatttcca 1320

<210> 5484 <211> 1760 <212> DNA

<213> Homo sapiens

```
cataattcgc agataaatgg tctttctcct gtatgggacc gaaagtgttt gttgagctct
                                                                     1380
cctgaggaaa taaaactttt cccacaaata ccacatatgt atggtttttc acctgtatgt
                                                                     1440
tttcgagaat gagtgataag agaactagag acagcaaatg ccttcccaca ggtatcacat
                                                                     1500
acataaggct tttctccagt atgcctacgg acatgatagg tcagtgtgct ggcttgagca
                                                                     1560
aatctctgtc cacacctatc acagacatat ggcttctctc cactatgctt ccttgcatga
                                                                     1620
atcttgagat tgctagaagt tgcaaactgt aagttgcata catcacattt atagggtttt
                                                                     1680
tcttcaccat gatgcatgcg actatggaag actagctgac atttctgagc aaatccttta
                                                                     1740
tcacacaatt cacatttgta tggcttctca cctgtatgag ttcttacatg cgttttcagc
                                                                     1800
tggttacatt gggtaaatgc ctttccacat aagtggcaga cgtaaggttt gactccttta
                                                                     1860
tgtattetea tgtgeettet caaactgetg gettetgaaa acaettteee acatgtgtta
                                                                     1920
cacattggct tggccttgga atacctctga tccagctctt ccccggagtt ctccqcctca
                                                                     1980
taaggactct tgacgctggc tatattagac atagagtgtt ctttcagagc acagtttggc
                                                                     2040
tgtgattttc cacgtttccg tttcactgta acagtgtgca caatatcttg tgctggaaaa
                                                                     2100
gtattttcca caactgatgt caactcgagt tctgaattat catttataag
                                                                     2150
```

```
<220>
     <221> misc feature
     <222> (1762)...(1496)
     <223> similar to gi3327164 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5484
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atgaacttaa gaaacattgg ttttacaaga taactagcta tatgaccatg accttaaggt
                                                                      120
gtgatatggt ttggctctgt gtctccaccc aaatatcttg tatctcccat tattccatgt
                                                                      180
tgtgggaggg gcctggtggg aaataattta atcacggggg caggtctttc ccatgctgtt
                                                                      240
ctcgtgatag taagcctcat gagatctgat ggttttaaaa atgggagttt ccctgcacaa
                                                                      300
getetetete ettgtetget gecatecatg taagatgtga ettgeteete tttgeettee
                                                                      360
accatgattg tgaggcctcc ttagtcatgt ggaactgtaa gtccattaaa cctctttctt
                                                                      420
ttgtaaattg cccaatctca ggtatgtctt tatcagcagc atgaaaatgg actaatacaa
                                                                      480
ggtgctagac aaggtgatta aaggctctat aaattctaaa ttgtgcaatt ctaagacatt
                                                                      540
cttggcattt tacatgtcta gatgactgcc atctttttt taatattttt ccctcacatg
                                                                      600
ttccagtcta ttctcattac agaagaatac gtttaacata cagttacaga aacagaggtt
                                                                      660
ttaaataaat atttaaaagt aacttcaaaa tatatttgca ctgaaatatg gaggcaaaat
                                                                      720
tgtttctgag tcaggaaaca tttattcttc cccataaatt taaatggagg tgaaactgtg
                                                                      780
aatatgaagc aaagaacatt tatctcacaa ggtaactctg aattctttta attctgaaac
                                                                      840
cagagacatg tacaacactt acagcattca cacaacacta ttttcaaaat aggtttttga
                                                                      900
cccctaaaaa tgaaaattct tagtgacaag ctttagatat gaaacttagc ccagtgggta
                                                                      960
ttcactttgt cacaaaaagc aactacagac aaatagtttt tccctctccc cgacacaaaa
                                                                     1020
actgaaatta cagactttta aagcagaaaa aattttctcc aaaatgcaaa tgattaaggt
                                                                     1080
ccaaggaaca aatgaacaga agatctcaat tattcaattg agcgagtgat ttagtttgca
                                                                     1140
tattaactcc ttttcttact acttcctgat atctgattct ggcaatattt atcttgtatc
                                                                     1200
tactgggcaa gacactggga acacaaagaa attttagaca aggtccagtg gtatgctggt
                                                                     1260
aaaggtttaa caactagctc ttaagggaaa ggtaggtctt cacttatagc atttctatgg
                                                                     1320
tgtaaatact ccaattgccg cagatttcaa gctagcaaca atttgacaac tgtctcacaa
                                                                     1380
```

```
aattootoaa actaacgatt gtoactoata agacattaca agocagotoo aacacaccac
                                                                      1440
cgtacagtct ccaccttcaa gtagttcata atctcttcat gggtaccttg tatcagatct
                                                                      1500
tgggcaactg ccggctgggg tgaccaggga attcttctgg tagcaaaacg tggagtctgc
                                                                      1560
acgttggaca tgtcccctgt tgcatcaacc atggtctaat gcactgagca tggaatttgt
                                                                      1620
gagcgcaagg caaaactgaa agattttctg gagacagatt ctcatgacag atcacacaag
                                                                      1680
gctcttcttc ttcctcttcc tcatctggat tactggctcc ttcccatgtg gcaggaccct
                                                                      1740
gtgaagtgag tggcctccag
                                                                      1760
     <210> 5485
     <211> 395
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     \langle 222 \rangle (397) \dots (71)
     <223> similar to gi48676 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5485
egeggtatet eegeageeet gagaagetea teaagaggat aaaaetgeet tagetegttg
                                                                        60
agtactttca ctttttcgtg ggatgagcta aggctttcag cttttttaga tacataagcc
                                                                       120
gcgtttcaag aaatcgaact tgcctttcaa gatcctcaat gcgtcggtct tttgacagct
                                                                       180
ccaatgctga tgccgctttt tctggatcaa ctgatattgc aatgtttctt ttggtgccaa
                                                                       240
tettgagege gegtaaacca getteteege getetteata gaeetteage cacetggeta
                                                                       300
cagaaccact accagcaagc ataaagtgag cagcagcctg attaagggac atgtgctgct
                                                                       360
cgatcacagc tttcacgacc ttaatacgca actct
                                                                       395
     <210> 5486
     <211> 540
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (9)...(150)
    <223> similar to gi4062479 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5486
```

120

180

aaggcgggag tgcggcaatg agcggcgaag cggcgtttta cggcctgcaa ccggtagata

gcgatctgca cgcgtttgct gcacatcagt cgttgttgaa ggcctacgaa aagctgcagc

gcgccaaagc agcattctgg gcaaaataaa atcaaatagc ctacgcaatg taggcttaat

```
gattagtctg agttatatta cggggcgttt ttttaatgcc ccgctttaca tatatttgca 240 ttaataaaat aattgtaatt ataaggttaa atatcggtaa tttgtattta ataaatacga 300 tcgatattgt tactttattc gcctgatgct cccttttaat taactgtttt agcggaggat 360 gcggaaaaaa ttcaactcat ttgttaattt ttaaaattta tttttatttg gataatcaaa 420 tatttactcc gtatttgcat aaaaaccatg cgagttacgg gcctataagc caggcgagat 480 atgatctata tcaatttctc atctataatg ctttgttagt atctcgtcgc cgacttaata
```

```
<210> 5487
     <211> 718
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (2)...(477)
     <223> similar to gi1552811 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5487
gatggtgaat aaaaacatcg ccgatagctt cctgcccgca ttaagcaaac aaatggcgga
                                                                       60
aagcggcgtg acattacacg cagatgcagc tgcactggcg cagttgcagg caggccctqc
                                                                      120
gaaggtggtt gctgttaaag ccgaagagta tgacgatgag tttctgtcat tagatttgaa
                                                                      180
cgtcaaaatc gtcagcgatc ttgacgatgc catcgcccat attcgtgaac acggcacaca
                                                                      240
acactccgat gcgatcctga cccgcgatat gcgcaacgcc cagcgttttg ttaacgaagt
                                                                      300
ggattcgtcc gctgtttacg ttaacgcctc tacgcgtttt accgacggcg qccagtttqq
                                                                      360
tetgggtgeg gaagtggegg taagcacaca aaaactecac gegegtggee caatgggget
                                                                      420
```

540

600

660

718

```
<210> 5488

<211> 461

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (460)...(359)

<223> similar to gi1651274 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

ggaagcactg accacttaca agtggatcgg cattggtgat tacaccattc gtgcgtaaat

aaaaccgggt gatgcaaaag tagccatttg attcacaagg ccattgacgc atcgccggt

tagttttaac cttgtccacc gtgattcacg ttcgtgaaca tgtcctttca gggccgatat

agctcagttg gtagagcagc gcattcgtaa tgcgaaggtg gtaggttaga ctattatgat

gggcaccatc taagatcata totgttocgt aagatotocg ggtogcgaca tagaattg

```
<400> 5488
ctacgaattc aatgtccgta cccgtacatc gtatagaatg gacttgccct gaccttacct
                                                                       60
aagttacatt gattgcggct aaatgtaaag atattgctgg tttattgttt gtttttgcga
                                                                      120
gatgcgccgc accattccga agcaaaattc ttaaaatgca ctcttttagt gctaccgctg
                                                                     180
gattactgtg gtgcaactag gttgtactga tgctgtttca gggtttgcct tgtataacaa
                                                                     240
agcaatagat gtgccaaagt tggataggag aatattgtta tccggataat gcactgatgc
                                                                     300
cgcatccggt gagcgtgccg aaatatggga tgtattccgg cacqataaqa aqqqattatt
                                                                     360
tacgtcgctg acgcagactc atcaacacag cagcaaaacc aaacaatgcc gtcagcaccc
                                                                     420
acagcggcca gttgccggta cgtgcgtatg gtgtgatttc g
                                                                      461
```

```
<210> 5489
     <211> 429
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (44)...(371)
     <223> similar to gi148183 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5489
tatgaccacg attacggatt cgatgtccgt acccgtacat cgtcccgact gtaaccaccc
                                                                       60
tgagattacc ctgctgaaga cgcttctggt caaccagact aatccggtcg atctctcatc
                                                                      120
gctgcatcag caaaatgccg taccgccgcg cgtcgcaaaa caactctgcc gtttactacg
                                                                      180
cctggccatc atttttgcca gccgtcgccg tgacgatctc gtgccagaga tgacattaca
                                                                      240
ggctaaccat gaactgttga ccttgacgct tccgcaaggt tggctaaccc aacatccgct
                                                                      300
gggtaaagag attattgctc aggaaagcca gtggcagagc tatgtccact ggccgctgga
                                                                      360
agtgcattaa tgagtaagtg ccggatgcga tgctgacgca tcttttccgg ccttgattat
                                                                      420
ttccctcgg
```

```
<210> 5490
<211> 537
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)...(356)
<223> similar to gi1742763 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

<400> 5490

```
tgacagacat agtcagaaca gttatcgcgg cttattgaaa atcatgccga cggcaaccaa
                                                                      60
tgcgcgcaat ttcactcagt gcgactcaat gctgattggc gctaattgtg ggqcqcatac
                                                                     120
cttcccgtat gttgagtgtc gtaacaatag tgcgcaactg gaacacgagg caacgacatc
                                                                     180
acgtattggt gaagatcaac tgttttactg cctgcaacgc gggatcagcg aagaagacgc
                                                                     240
catctcgatg attgttaacg gtttctgcaa agacgtgttc tcgqaqctqc cgttqqaatt
                                                                     300
tgccgttgaa gcacaaaaac tcctcgccat cagtcttgaa cacagcgtcg gataaggaat
                                                                     360
aaacatgtta agtattaaag atttacacgt cagcgtggaa gataaagcta tcctgcgcgg
                                                                     420
attaagcctc gacgttcatc ccggcgaagt tcacgccatt atggggccaa acggttcggg
                                                                     480
caaaagtacc ttatcggcaa cgcttgccgg gcgagaagat tatgaagtga ctgtccg
                                                                     537
```

```
<210> 5491
     <211> 471
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3)...(357)
     <223> similar to gi2367273 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5491
tgctgcgtcg tccggaaatg acttatgaaa aattaaccac gctgacgccg tttgcccctg
                                                                       60
cgttgacaga cgaacaggcg gcggaacagg ttgagattca ggttaaatac gaaggttata
                                                                      120
tegegegeca geaagatgag ategaaaage agetgegtaa egagaacace etgetaceeg
                                                                      180
cgacactgga ttaccgccag gtatccggtc tttctaacga agtgatcgcc aaacttaacg
                                                                      240
atcacaaacc agcctctatc ggccaagctt cgcgtatttc tggcgtcacg cctqcqqcca
                                                                      300
tctccattct gctggtgtgg ctgaaaaaac agggtatgct gcgtcgtagc gcataacgca
                                                                      360
ttaaaaatgc ctggtaagca cccgcttacc aggcaacgca tcaagaacag gtaatcactg
                                                                      420
tgctccacga cctctcagtt gtgtatcaaa cacgcaggta tctctctcgc c
                                                                      471
```

```
<210> 5492
<211> 444
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (25)...(316)
<223> similar to gi4062503 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5492

<210> 5493

```
ttactaattc catgtcgcgt cccggagatc agccccactg taagggcggt cgcgggatca
                                                                       60
atgcgcgtcg gctccgggac ggcgctggtg ggcgatggtc ctacggtcgc tgcgcgaatc
                                                                      120
aacgaatatg ccgcgcttgg catcgacagt tttgtgcttt cgggctatcc gcatctggaa
                                                                      180
qaaqcgtatc gggttggcga gttgctgttc ccgcttctgg atgtcgccat cccggaaatt
                                                                      240
ccccagccgc agccgctgaa tccgcaaggc gaagcggtgg cgaatgattt tatcccccgt
                                                                      300
aaagtcgcgc aaagctaagg aagaaataat ggcaacgcca gtgaagaagt ggttattgcg
                                                                      360
cgttgccccc tggtttttac cggtgggcat cgtqqcqgtq tqqcaactqq qctcctcqqt
                                                                      420
tggctggctg tcgacgcgta tttt
                                                                      444
```

```
<211> 469
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (3)...(241)
     <223> similar to gi405858 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5493
cgctggtggt tggctggaat attcaggata ccacccgtct gtggctggag ggctggattg
                                                                       60
ccagtcaaca aggatggcgc attgatgtcc tcgcccactc gctcaatcaa ctacqccctg
                                                                      120
aactattcga aggccgtaca ttgctggtgt ggtgcggtga aaatcgaacc tccgcccaac
                                                                      180
agcagcaact caccagttgg caagaacaag gccatgatat tttcccactc ggcatttaat
                                                                      240
gattcgttaa caaatgcgct ttactgtaca atcctttcgt taacataagg agtgcattat
                                                                      300
gcgcatagct aaaattgggg tcatcgccct gttcctgttt atggcgttag gcggaattgg
                                                                      360
tggcaacatg ctcgcaggtt atacctttat ttggcgtgca aggtaagtga gtgcggcaac
                                                                      420
ctctatgatc atcccgttcg cgatgatgtg agcgcctaac ataaatgcg
```

469

```
<210> 5494
<211> 563
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (565)...(197)
<223> similar to gi537108 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5494 ctgtggatcc atcccttcgg caaatccgac gacggcagct accagaacga gggcaataaa 60

```
gccgttaact ttaaagccga tcatcaggat aagaagcagc gcgacgcctg ccgcaataat
                                                                     120
gattaatggc atagtettta tetettatta gtgccagaaa agcagegett tegegetgea
                                                                     180
cgtagggggg ctgttaaaca gccactaaca tgccgccatc aacaacaac aqqtqqccqt
                                                                     240
ttacgaaatc agaggctttt gaagaaagga acaccgcagc accaatcagt tcctgcggat
                                                                     300
ctccccagcg tgcggcgggg gtccgtttgc acaaccaggc qqtqaaqqct tcqtcctcaa
                                                                     360
ccagtgcttt agtcatttct gttttgaaat agcccggcgc aataccgttg acctgaatat
                                                                     420
tgtggcgcgc cagctcgacg cacatgccgc gggtgagcat ttttaccgcc cctttcgatg
                                                                     480
cggcataagg ggtgatggtg tcacgtccca gttcgctttg catcgagcaa atattaataa
                                                                     540
ctttccctgc cttgcgttca acc
                                                                     563
```

```
<210> 5495
     <211> 533
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (536)...(150)
     <223> similar to gi405852 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5495
gattacgaat tecatgteeg taccegtaca teteegggae tgggaeatte etgaggttae
                                                                       60
ccaaactgat ctcatcgcaa ccgacattgc ttaacgccgt cagggcctgc ggtgtcagtt
                                                                      120
ctaataattc cggacgtagt gaattcatga ctgaagattc tccgcaagcc atgatgccag
                                                                      180
ctcgcccggc gtcatggcgg ctatttgtgc gccgacatta accagegcct gggccgtatc
                                                                      240
gcggtcatag caaggtgttg cggtgctatc gagcgctqcc agtcccaqca ctttqatqcc
                                                                      300
gctctggaca cactttttca cctgatgcgt cagtaatgat gatgaacccc cttcgtaaaa
                                                                      360
atogotoacg aggataatga cgcttttcgc tqqttqttca ataaqttqcc qaccatactc
                                                                      420
cacggcactg gcgatattgg tcccgccgcc caactgtact ttcattaata actctaccgg
                                                                      480
atcggcaacg tctgccgtga gatcaacgac gcttgtgtca aacgccacca gat
                                                                      533
```

```
<210> 5496
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (391)...(83)
<223> similar to gi4062233 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5496
gcattcagcg cgacgattcc aggccgctac ccgttcttgt cgttgagatt gttcaatttt
                                                                       60
ctgcgtcatt ttgattgcct tattcttcgc ggatgccgga aagttctgca cgggagagca
                                                                      120
ccagacgggc gcgatcgata accggaccgt ccaccatctt gccgttcagg gaaaccacgc
                                                                      180
cgaggccttc gcgagcggcg gcttcagcgg cttctacgac gcgqcqqqcq tqatccactt
                                                                      240
ctttctgggt cggggcgtat aggatgtgca gcagatcaat ctqacqcqqq ttqatcaacq
                                                                      300
atttgccgtc aaagcccagc tgtttgatgt gggcggcttt ttgcacaaat ccgggttcgt
                                                                      360
tgttagcggc ggaattgacc cgattgaaa
                                                                      389
     <210> 5497
     <211> 590
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (592)...(92)
     <223> similar to gi3041757 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5497
gaactgatta agagatccat aggtgaagaa gaaaaacggg gccagcaaca ataaccagcc
                                                                       60
agggcettgt agcaatacgt tecgaegtte agttateacg acgeaecgee ategaaaccg
                                                                      120
taaaaatacc ccactcatca atccgttgtg tgcatttatc aaatccggca tcacqcacqa
                                                                      180
gtgaatccat ctccccttgc gaacgcacgc gcattaccca cggtttacca tctttatgac
                                                                      240
tgggtaacac cccggcaatc atctccagtt gagggtgcca cggctgcccg gtgtagatga
                                                                      300
gaatgccgcc cggttcgatg gcattggcaa gacctgcgag tgagtttttt acctgctcat
                                                                      360
tttcgggaaa aagctcatac aggccagaga caatcgccag cgtaggccgc ggagttaacg
                                                                      420
cgctgagttc ctccgggtta aacgcatcgc cctgttcaaa acgcacccgc ccagacattc
                                                                      480
cccgttgagc aatcatctct tgcccctgtg caacatttaa ctcgctgtaa tcacgtaaca
                                                                      540
aaatateget taeggeagge tegtttgeea gegeateeag taeatagege
                                                                      590
     <210> 5498
     <211> 567
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (28)...(346)
     <223> similar to gi987639 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5498
aagtaggaca cgattacgaa ttctaggtcc gtacccggac atcggctatt atgcatttac
                                                                       60
tacgccggtg cacgactcaa tttactcctg gcggaagatg agatgctgcg agtgggcgga
                                                                      120
aaagtgctgg cgattaccgg ctttactccg aatgccctgc aacagcgtgc ttctcattgc
                                                                      180
ctgtatacca ttgccgaaga acaagcgaca aacagtgctt caatctctgc ttgtcacgct
                                                                      240
cagggaatgt taacggattt gctgttcatt gcgctgattc agcaggatct qqaactqqca
                                                                      300
ccagaacgta ttcgtcatag tgaagcgctg gtgaaaaaac tggtctgagt aaagaatgcg
                                                                      360
cgtataatgc ccgcccggtt tgtgttgttt tgagagtttc cttatggcgt tgttaatcac
                                                                      420
taaaaaatgc atcaattgtg atatgtgtga acccgaatgc ccgaatgagg cgatttcaat
                                                                      480
gggagatcat atctacgaga ttaacagcga taagtgtacc gaatgcgtag ggcactacga
                                                                      540
gacaccaacc tgccagaagg tgtgccc
                                                                      567
    <210> 5499
```

```
<211> 336
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (12)...(285)
     <223> similar to gi882573 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5499
cttgtaaaac agttatgacc atgactacga atttcatgtc gcgacccgga gatcgtctgg
                                                                       60
actataacaa acatactgat atccgcggta ctactgtcgt tggcgaacgt attctggaca
                                                                      120
gccagagcgg cgaagtaact ttaggtactc cggtagtaat tacgttcaac aataccaaca
                                                                      180
gctatcagga actgaatttc aaagctcgta tggaatcccc aagcaaagat gccacccgg
                                                                      240
gcaacgttta cgctcaggct gactacaaga ttgcttacga gtaatcgcat ttggccgggt
                                                                      300
tcgcccggcc acatcattaa cggattaatg ataagt
```

```
<210> 5500
<211> 375
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)...(312)
<223> similar to gi1789617 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5500

accqqa

```
ccctggcgatgaccgactgctcaacgccggaagacggcctggcatgccaaaagctgggag60ccgaaattattggcactacgctttctggctataccacgcctgaaacgccagaagagccgg120atctggcgctggtgaaaacgttgagcgacgccggatgtcgggtaattccagaagggcgtt180acaacacgcctgctcaggcggcggatgcgatgcgccacggcgcgtgggcggtgacggtcg240gttctgcaatcacgcgtcttgagcacatttgtcagtggtacaacacacagcgatgaaaaaagg300cggtgctatgaccacactggcgattgatatcggcggtactaaacttgccgccgcgctgat360tggcgctgacgggca375
```

```
<210> 5501
     <211> 846
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (831)...(504)
     <223> similar to gi4062221 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5501
tttagttcgg acgttattga ctatattaat tggttgttca aggcctctga gatttttctc
                                                                       60
aagatggtga tgcagattta accetgttgt cgtcggcgcg atacetttte ctgagcgaat
                                                                      120
gaataaaggg tcattaaatt gcgcacgtaa gcgttgtaac gactggctca cggctgatgg
                                                                      180
ggtgatatat agtgattcag cagctttgct aatgcttaaa tgctggtaaa tacactcaaa
                                                                      240
tatgacaaga agatttaagt cgaacttttt caagtcgtag agattggcca tacactactc
                                                                      300
cggttatatt tttcttccat gatatattca cttaatcaat gttttttgcg tatatatttt
                                                                      360
tattgattat gattttttgc ttaactcagg attaagtttt tctaaaatag cacagccact
                                                                      420
tatggcagag cgagcaattc atgcttttt aggatggttg aaaagcaggg atatagttca
                                                                      480
accatccatg aattaccttt tatttattcc ccataatgat attaagcgtt ttctgatcgg
                                                                      540
gcaaccccac ggcctgttgt agcgtatttt ccttactcat gtaatagata gccggcgtga
                                                                      600
catttgcccc cagatcgtcc atcagtttat cattgtcact taacactttc atttgctctg
                                                                      660
tacttacgtt tgcaggcacg tttagcttaa gcttgccacc agaggcttca tattgttgcc
                                                                      720
aggtttttgc gggatctttg gaggcaagaa ttgccgctgc tgtcgccggg ctttctggct
                                                                      780
```

```
<210> 5502
<211> 353
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)...(295)
<223> similar to gi1789468 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

tgatagcccc agccagcaat gttgttaatt gcactttgtc agagtctgcc cgcaagacgg

840

846

```
<400> 5502
ggattcggta gtgcgtgcca aaaaggtttt tggtgaaaac catatcacca ttatctcgca
                                                                       60
agaatttcat aatcaacgcg ccatctggct ggcaaaacag tacggcatcg acgctatcgg
                                                                      120
ttttaacgcg ccagacctca atatgaagca cggtttttat actcaactgc gggagaaact
                                                                      180
cgctcgtgtc agcgccgtga ttgacgccaa aatcctccat cgccagccga aatatctcgg
                                                                      240
qccttcggtc atgattgggc cgtttagtga gcatggctgt ccggcgcaga aataatgcgt
                                                                      300
atctgcgcac gtcgaagatg aaaaaggcgt gctacattgc cgacagaatc cct
                                                                      353
     <210> 5503
     <211> 637
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(437)
     <223> similar to gi1651350 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5503
aaagacattg gcgcgctgga ggaagtgtgg ggcagtagcg tgatgaatcc gtggctgccg
                                                                       60
aaagagcaac aaagtagcat tetgaaagtg aeggtgettg agcateatee geattaegeg
                                                                      120
atgaccgcgc tggcgctggg cgatcagcat ttgtgggtca ataagctgga cgaaccgctg
                                                                      180
caagetgege taegtateeg catteagget teegatgttt etetggtttt acaaeegeeg
                                                                      240
cagcaaacca gcattcgtaa cgtattgcgg gcaaaagttg ttaatagtta tgacgacaac
                                                                      300
ggccaggtgg aagtggaact ggaagtcggc ggtaaaacgc tgtgggcgcg tatcagcccg
                                                                      360
tgggccaggg atgaactggc gatcaaacct ggcctgtggc tgtacgcgca aattaaaagt
                                                                      420
gtgtcgataa ccgcctgatt aaatcaggtg gctataaatg aactgggcaa tgctgtcggt
                                                                      480
ggtgttatca ccaatcacaa tgttggcgcg cgcttttacc gcgtcatcgg cgttgcccat
                                                                      540
cgccacgcct gtaccagcgg cttccagcat actgatatca ttaaagttat cgccgaatgc
                                                                      600
cacgacgttt tccatcgacc aaccttgcgc ctcaacc
                                                                      637
    <210> 5504
     <211> 305
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (308)...(135)
    <223> similar to gi882661 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5504
tgcctacggt tctggcctgg ggacttgtag gcctgataag acgcgtcaag cgtcgcatca
                                                                       60
ggcgctgaat gtcggatgtg gcgtgcggcc tacaaatcaa accaaattca attggttacg
                                                                      120
attatcccgt caaagtaatt ttttcgctaa cgtccagacc ccggtattcg tggtggaaag
                                                                      180
cgccacgaca cccgcgttaa tcgcattacg cgcatcttct tcatcgcaca ccagcccacc
                                                                      240
ggcaatcage ggttggegga ttttetetgt cacecageee ageaetttgg geatacagee
                                                                      300
tggca
                                                                      305
     <210> 5505
     <211> 157
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(89)
     <223> similar to gi216531 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5505
atcgcccttg cggcgttcct ctttgccaca gtgccgaacg atacgcatca aaatgtagct
                                                                       60
atttcgcggc gaaaaaggag cgcgcaatga agttctggcg acccggtatt accggcaaac
                                                                      120
tgtttctggc gattttcgcc acctgcattg tcttgct
                                                                      157
     <210> 5506
     <211> 404
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (406)...(47)
     <223> similar to gi396335 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5506
catttgggct gttcctaagt gcgtcaggcg gtcaagtgta tcatcactca tactctgccc
                                                                       60
gacacatege caeegtatet tetateagae ggegegetae ggtgeeggge ggegggagta
                                                                      120
```

acggcaaatc gtcatagcga taccagttcg cctcgagcaa ttctttcggg tcgatcacga

```
tgtcgccgct gtcatattcc gccataaacg cggtcattaa agactgagga aacggccacg 240 gctgagaagt cacgtaacgc aagttttaa ctttaattcc gctctcttcc atcacttccc 300 gcgcgactgc ctgctcgagg gtttcgccca cttcgacgaa tccggcaagt actgtatgga 360 caccgttacg atggcggta tgctgtgcga ggaggatcga atca 404
```

```
<210> 5507
<211> 730
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(733)

<223> similar to gi41437 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5507
tgtttgaccg tgaacgcggt gcttttaccg gtgccagtgc ccatggtatc qqtcqttttq
                                                                       60
aactggcgga taaaagctcc ctgttcctcg acgaagtggg cgatatgcca ctggagttac
                                                                      120
agccgaagtt gctgcgtgta ttgcaggaac aggagtttga acqtctcgqc agcaacaaaa
                                                                      180
tcattcagac ggacgtgcgt ctaatcgccg cgactaaccg tgatctgaaa aaaatggtcg
                                                                      240
ccgaccgtga gttccggaac gatctctatt accgcctgaa cggattcccg attcacctgc
                                                                      300
cgccactacg cgagcgagcg gaagatattc cgctgctggc gaaagccttt accttcaaaa
                                                                      360
ttgcccgtcg tctggggcgc aatatcgaca gcattcctgc cgagacgctg cgcaccttga
                                                                      420
gcaacatgga gtggccgggt aacgtacgcg aactggaaaa cgtcattgag cqcqcqqtat
                                                                      480
tgctaacacg cggtaacgtg ctgcagctgt cattgccaga tattgtttta ccqqaacctq
                                                                      540
aaacqccgcc tgccgcaacg gttgtcgccc tggagggcga agatgaatat cagttgattg
                                                                      600
tgcqcgtgct gaaagaaacc aacggcgtgg ttgccgggcc taaaggcgct gcgcaacgtc
                                                                      660
tggggctgaa acgcacgacc ctgctgtcac ggatgaagcg gctgggaatt gataaatcgg
                                                                      720
cattgattag
                                                                      730
```

```
<210> 5508
<211> 243
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (245)...(131)
<223> similar to gi544485 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5508

```
atgtccgtac ccgtagaacg taacgaatgg caggacaatg gagtgatgct ataaagctgc
                                                                       60
cacgatgcgc acaccgatgg cttcatcggt cagcaaaata ttgccgaccc ctaaqactaa
                                                                      120
aatacgcatt acagaacctt cactgaaacc acttcgttgc cgtcagcatc cactacgtgt
                                                                      180
accgcacagg ccatgcacgg gtcaaaggag tgaatggtac gcaccacttc cagcggttta
                                                                      240
ttc
                                                                      243
     <210> 5509
     <211> 352
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (355)...(48)
     <223> similar to gi688405 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5509
accggcgcaa taaacctgca qgatttctat caggccggga ttatttaatc cttcaatccc
                                                                       60
agacgtttcg ccagccgatg caggttggcg acgtcggttt ccagcatccg cqcqcaqqca
                                                                      120
gcccagttgt gatgattttg tgccagtgcc tgacgaatag tttcacqctq qaacqcttct
                                                                      180
gtcgcttcac gcaggttttg cttaacaacg ggcaccgccg ccacttctqg cqtcqqcaac
                                                                      240
gtcacctcag gaaaagcaaa atgttgcgcc tcaagaatca cttcatcgcc gctgcgggtg
                                                                      300
gctctcgcca gaactaccgc ccgatgaata gcatgttcca gttcgcgcac gt
                                                                      352
     <210> 5510
     <211> 214
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (217)...(6)
     <223> similar to gi1565189 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5510
ggttactcgt cagcgatgct tgccggtggc cagttttcca ggcgcatgcc cagagacagt
                                                                       60
ccacgggaag ccagcacgtc tttaatctca gtaagagatt ttttaccaag gttaggcgtt
                                                                      120
ttaaggaget caaceteggt aegetgtace agateaeega tatagtggat agettetget
                                                                      180
```

ttaaggcagt tagcagagcg gacagtcaat tcca

```
<210> 5511
     <211> 171
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (3)...(132)
     <223> similar to gi290405 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5511
caggcgatcg cgtagtaata agtgggctgc agaaagtgcg tcctggtgtc caggtaaaag
                                                                       60
cacaagaagt taccgctgat aataaccagc aagccgcaag cggtgctcag cctgaacagt
                                                                      120
ccaagtctta acttaaacag gagccgttaa gacatgccta atttctttat c
                                                                      171
     <210> 5512
     <211> 360
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc_feature
     <222> (1)...(361)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (3)...(282)
     <223> similar to gi4062261 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5512
aacaattagt gcaggcctgc caacctacag aagaatcatt aatgccgatt gtgagccgcc
                                                                       60
ttgatgcaga aaatcgttgt ccactggaag cattaattat tcgtcgatta ttaattcagg
                                                                      120
eggegaattt taeegagaag caaaetgttg aaeeggagee geaaeegeag eeaatgeeeg
                                                                      180
ttgacgatgg tgggccaggc tgtctgggca tcattaaaat tattttctat atttttatct
                                                                      240
ttgctggttt gatagggaaa atactccatc tgttcgggtg acagtcgacg ttaatgtgcg
                                                                      300
ggaagcccgg caagtaatct ttccgcattt ttgtaatgtt gcccggcggc cagtnttatc
                                                                      360
```

```
<210> 5513
     <211> 504
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(505)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (2)...(290)
     <223> similar to gil45470 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5513
aaaccgttcg cacatggctt acaggaagtc gccaagcggg gtcgcgctgg aatgtaaaga
                                                                       60
cggtcgtatt ttcagtggca gctacgctga aaacgccgca ttcaacccga ctctgccacc
                                                                      120
gttgcaggga gcgttaattc tgttgaatct caagggttat gattacccgg atatccagcg
                                                                      180
cgcggttctg gcagaaaaag ccgatgcgcc gttgattcag tgggatgcca cctccgcaac
                                                                      240
gctgaaagct ctcggctgtc acagtatcga ccgagtgctt ctcgcttaag cctggtgccg
                                                                      300
gatgcggcgt gaacgccttg tccggcttgc cagccctctc ctggtgtcga aattcccggc
                                                                      360
aaacagtttg ccgtttcttg cgcaaaacca gcgggtaaag tagcctgatg gaaattttcc
                                                                      420
ttagatcgag tctcctgcat gttaaagcgc gtgttcctca gcctgttagt cctgatcggc
                                                                      480
ttgctgccgt tcnctgtgct nggc
                                                                      504
     <210> 5514
     <211> 372
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(373)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (372)...(250)
     <223> similar to gi1707458 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5514
agaaattaac gcgcgatgat gaggcggaaa agtgagaaat aaatggggtc gctaaatgtc
                                                                       60
ccctaaggtt gcgggcaaac gcaaaactgc ctgatgcgct acgcttatca ggcctacacc
                                                                      120
gctcctgcaa tatattgaat tcttgcggtt tcgtaggccg gataaggcgg tcacgccgca
                                                                      180
```

caatg

<210> 5515 <211> 545

```
tccggcatga acaacgcgca ctttgttagc aatctcgggg caactaaatg ttgcccctt 240 tcgttttac cctaccgctg gcgtcgggtc atcgcctttg tagtcgcgtt ttacttccgt 300 cacctcatcg cccttctcgt tgtgcagatg cacttcaagc tggttaaagg caatggtgat 360 gtcgntttca cg
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(546)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (545)...(89)
     <223> similar to gi1788699 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5515
gtgcgccact gatcgcccac ttccttcagt tcatgggctg gtttgttccq cagctccacc
                                                                       60
agcgcctggc aatatttatt actcattaag ccccacgta attccctgag agataccact
                                                                      120
cttcacctga tgcagcccgc ttactgcttt tccgtaaaca ccgttcacga cgcgccagaa
                                                                      180
aattgtttcg ttctggctgg gagtggcttt cacggaatgc cgccatccac accgttgcag
                                                                      240
cacgacggta taagcccctg gactccagtt cttccgcctg gcgggtcagg cacaaaatca
                                                                      300
cccgcgggtc gttagtgccg acatagaaat tgcgcacagg tctggtttca cgaactggtt
                                                                      360
gtggttccgg atcctgcgct ctctcagtca ggcgcgggaa atgtctgtgt gtatctcctt
                                                                      420
cacaacggtg agccacacgc ccactctqac gtaacttgct tqctqactqc agaacqcqct
                                                                      480
gccgtgagta acctgcaaaa gcatccgcaa tgtctcccca agtacagccc cgatgggntt
                                                                      540
```

```
<210> 5516
<211> 353
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(226)
<223> similar to gi1742880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

545

<210> 5517

```
<400> 5516

ttggccaacg catttacgcc tgcgcggttc gggtttcgtt aatgccgtcg gacggatcgt 60
cgcagtcttc acgccctatg gcgttgcggc attattaaca cattatgggt cgatcacggg 120
gtttatggta cttggtgtta tgttattgct ctgtgcgctg gttctctcca tttttggcat 180
cgaaacgcgg aaggtgtcgt tggaagagat ttctgaggtg aattaaatct ttcgttgatg 240
gcatcaattg ccagatgtgc cactgacgtg ttttatttgg cctacaatgc cagtacagaa 300
ttgttggcca gcgtaaaatt acccctgtgg ctcttcccag tctggcagcg tat 353
```

```
<211> 588
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(404)
<223> similar to gi537232 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5517 gaaatcaccg gtaggggcca gcggcttgat gcagattatg cctggtacag cgacccatac 60 ggtgaagatg ttctctattc ccggttatag cagtcctggg caattgctgg atccggaaac 120 gaatatcaac attggcacca gttacctgca atatgtttat cagcagtttg gcaataatcg 180 tattttctcc tcagcagctt ataacgccgg accagggcgg gtgcgaacct ggcttggcaa 240 cagcgccggg cgtatcgacg cagtggcatt tgtcgagagt attccattct ccgagacgcg 300 cggttatgtg aagaacgtgc tggcttatga cqcttactac cqctatttca tqqqqqataa 360 accgacgttg atgagcgcca cggaatgggg acgtcgttac tgatccgcac gtttatgata 420 tgctatcgta ctctttagcg agtacaaccg ggggaggcat tttgcttccc ccgctaacaa 480 tggcgacata ttatggccca acaatcaccc tattcagcag cgatggcaga acagcgtcac 540 caggagtggt tacgttttgt cgacctgctt aagaatgcct accaaaac 588

```
<210> 5518
<211> 365
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2)...(184)
<223> similar to gi1773175 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5519 <211> 578 <212> DNA

<220>

<213> Homo sapiens

<221> misc\_feature
<222> (1)...(579)

```
<400> 5518

cgaaaatgcc ggcatcgccg cccgctttac gttgggaccg gaagcggtgg tggacaaagt 60
acgccatgct tttattagcg agaagccgaa gatgcgctat ccggtgacgc tggtgacctg 120
ggcggtaatg gtgcttaagc gcctgctgcc gggggcgcgtg atggacaaaa tattgcaggg 180
gtgagttgaa gcgcgcgtt aagccccat gtcaaagaaa atatcgacaa catgagagcg 240
actccatgtc cgtagaaaat attgtcaaca ttaacgaatc taacctgcaa caggttcttg 300
aacagtcgat gaccactccg gtgctgttct attttttgtc tgaacggaac cagcacttgt 360
tgccg
```

```
<223> n = a,t,c or g
    <220>
    <221> misc_feature
    <222> (578)...(399)
    <223> similar to gi42034 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5519
tggggttcag caaccacatg tacctgatag ctatgacggg cattcagggc atcaagtacc
                                                                       60
acctgattga catcggcaaa cgtcagttgg atacccgcgt ctgccagcag tttaccgata
                                                                      120
aagccacgac cgatattacc tgcgccaaaa tgtaatgctt tcatagtatt aaccttcatc
                                                                      180
aatgttttta cccgagaggg ctggggtgag gcttttccct cacccaaacc ctctccgtga
                                                                      240
ggagaggggc agcgccggat gcggcgtaag cgccttatcc ggcctacaag aacgtgcaaa
                                                                      300
ttcaacaaat tgtgatgcat cctgtaggcc tgataagcgt agcgcatcag gcaattaacc
                                                                      360
ccaccttctc catgtggaga gggtgggatt ggattactta cgacctgcca gcagttccag
                                                                      420
cacttcatcc acqctqqtqq tqtqtqccaq acqctcqatq acqqactcat catccaqtqc
                                                                      480
```

540

578

```
<210> 5520
<211> 370
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(325)
<223> similar to gi1789518 in the genepept database release 114,
```

attggtcagg ctggtgataa cctgaatgtg ctcgttgtta cgggcagcaa taccaatcac

cagacgggca atgtcatctt cttcttcncc gtagccca

O

## Run with FASTXY 3.3t00, default parameters

```
<400> 5520
atatgcccct tgcccatcaa gtgattgagg agcatatcac ggtcaatcca tcatcaccgg
                                                                       60
cattccgtca tggcaagtcg ttaggctctg ggaaaaataa agactggtca cgggtaaaat
                                                                      120
ttggtgctgg tcgttatcgt ctcttctttc gttatagtga aaaagagaaa gtcatcattc
                                                                      180
tgggatggat gaacgatgaa aacactctgc gcacctacgg taaaaaaaca gatgcctata
                                                                      240
ccgtattcag caaaatgtta aaaagaggac atcctcctgc cgactgggaa accctcaccc
                                                                      300
gagaaacaga agaaacccat tgatggtgtt cacaatgccc gccgaacgca ttcgtgttga
                                                                      360
ccagcgggca
                                                                      370
     <210> 5521
     <211> 384
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2) ... (329)
     <223> similar to gi145453 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5521
tatcactgtg atgaactctg ccggaggcaa agcatttgac ctgttcggcg aactgaccgg
                                                                       60
tatcgcagta ctgctgacta tgctgccgta tttctactct tgcgttgacc tgattcgttt
                                                                      120
tgaaggcgtt aacatccgca actttgtcag cctgatctgc tctgtactgg gttgcgtgtt
                                                                      180
ctgcttcatc gcgctgatgg gcgcaagctc cttcgagctg gcaggtacct tcatcgtcag
                                                                      240
cctgattatc ctgatgttct acgctcgcaa aatgcacgag cgccagagcc actcaatgga
                                                                      300
taaccacacc gcgtctaacg cacattaatt aaaagtattt tccqaqqctc ctcctttcat
                                                                      360
tttgccccat qtqttqqqaq qqqq
                                                                      384
     <210> 5522
     <211> 511
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2)...(171)
     <223> similar to gi1800067 in the genepept database release 114,
```

Run with FASTXY 3.3t00, default parameters

```
<400> 5522
actgttgccc attatgcagt tgccagtggc agatattaac gcccagaccg ccattatgca
                                                                       60
tgacggcaaa gcctcagaag gcgatattca gggacacgtt gatggttgga tcaaagccca
                                                                      120
ccagcagcag ttcgatggct gggtgaatga ggcgctggca gcgcagaagt aatttttatt
                                                                      180
cgggcggata aggcgttttt gccgcatccg ccgttctgtg cacaatgcct gatgcgacgc
                                                                      240
tggcgcgtct tatcatgcct acaaaccaca tcgcacattt caacaatcta tctttcatcc
                                                                      300
catattcatc aacatccgct attattgatt tccagcttaa tcatcacctg atgaacaaaa
                                                                      360
ataatgacta aacctaatca tgagcttagc ccggcgctga tcgtgctgat gtctatcgcc
                                                                      420
accggtctgg cggtagccag taactattac gcccagccat tgctcgacac catcgcgcgt
                                                                      480
aacttttccc tttccgccag ttcggcaggt q
                                                                      511
     <210> 5523
     <211> 412
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2)...(261)
    <223> similar to gi1651330 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5523
cagcagtacc gataatccgc cagtgattgt tgaagtgtct ggtattggtc agtacaccgt
                                                                       60
ggtggttgag aaagatcgcc tggagcgttt accaccagag caggtggtgg cggaagtgtc
                                                                      120
cagccgtttc aaggccaacc cgaaaacggt ctttctgatc ggtggcgcaa aagatgtgcc
                                                                      180
ttacgatgaa ataattaaag cactgaactt gttacatagt gcgggtgtga aatcggttgg
                                                                      240
tttaatgacg cagcctatct aaacatctgc gtttcccttg cttgaaagag agcgggtaac
                                                                      300
aggcgaacag tttttggaaa ccgagagtgt caaaggcaac cgaacaaaac gacaagctca
                                                                      360
agcgggcgat aattatttca gcagtgctgc atgtcatctt atttgcggcg ct
                                                                      412
    <210> 5524
    <211> 773
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (22)...(720)
    <223> similar to gi1742424 in the genepept database release 114.
```

Run with FASTXY 3.3t00, default parameters

cgc

```
<400> 5524
catcactgtt cgtcgctgta catcgttcag aatgcgaaaa ccctgctgat acccacctta
                                                                      60
atcgtcttgc ttcacatgat ggacgtgatc cgccatcatc aaccaataag tcgtcgggaa
                                                                     120
gccagagcta aagcgattga cctgctggaa gagatgcaaa tcccggatgc cgtggaagtt
                                                                     180
atgtcgcgct atccgtttga gctttcaggt ggtatgcgcc agcgggtaat gattgcgctg
                                                                     240
gcattctcct gcgagccgca attgattatt gccgacgaac cgactacggc gctggacgtc
                                                                     300
acggtgcagt tgcaggtact gcgtttgctt aaacataaaq cccqcqccaq tqqaactqcq
                                                                     360
gttctgttca tcagccatga tatgaccgtg gtgtcgcaac tgtgcgatag cgtatacgtg
                                                                     420
atgtatgccg gcagcgtaat tgaaagcggc gtgacggcag acgttatcca tcatcccgg
                                                                     480
catcogtata ccattggttt gctgcaatgc gcaccagaac atggagtccc acgccaqcta
                                                                     540
ttacccgcca ttccagggac ggtaccaaac ctcacccatt tgcctgacgg ttgcgctttt
                                                                     600
cgcgatcgtt gctatgcggc aggtgcacag tgtgaaaacg tcccggcgct gacagcgtgt
                                                                     660
ggtgacaaca accagcgctg tgcctgttgg tatccgcagc aggaggttat aagtgtgtga
                                                                     720
cacgttatta acgttacgag acgtccctat ccctttcccg gcccqtaaaa act
                                                                     773
```

```
<210> 5525
     <211> 423
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (426)...(66)
     <223> similar to gi4062426 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5525
cccatcatta cgaattcaat gtccgtaccc gtagatcgca cagagtggga aagccttgtt
                                                                       60
ttatcccttc ctgagaatgt tcgatctgca tatcttttaa aaagataacc atcagcgaca
                                                                      120
gccacaaaat tccgttgaca aggttgaaga gattaaacag tccgttgccc ccgttcagcc
                                                                      180
aggcatgttt gctgatttca ataccaacgg taaaqatcaq catttqcaqc attcccatcq
                                                                      240
cggcagaaac cgtaccttta ctcatatcgc tggcaaacag ggttaatcgc accagtcccg
                                                                      300
cattcgccag accaataccg aaagcataaa tacttaaccc ggcagtcatc cataaatacg
                                                                      360
```

cgtgcgatga gataaccgtt gccgcagcag cgaccaatag accaatcata atcggccagc

420

423

```
<210> 5526

<211> 648

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (627)...(45)

<223> similar to gi504496 in the genepept database release 114,
```

```
<400> 5526
acggcaaagg gaagagaaag ttgcccgcat gggcgggtaa ctaccttaca gccccgcca
                                                                      60
tccatgccga taactcccgt agctctttt cctgttccgg gaagtcaacc aacagcgctt
                                                                     120
cgcactcctg ttgcagcata tctgcgcggt acaggcagcc ttgcagtcgt ccggcgaggg
                                                                     180
cttccagcgg cgcggggttg aggctgtcgg taaacacctg ggcgcgggtg atatggcctt
                                                                     240
tttcaacgtc gaaatgcagt tccacgccgc cccaggtaaa gcgttcatcc agcagatgcg
                                                                     300
agaatgccgg agcctgaccg aagttccatt cccagctact ctggcgggca aaggtttcgg
                                                                     360
cgaagtttgg caagtctggc gttttgttcg gggagatgat ttccgcttcc acgcgctcgc
                                                                     420
cataatgggc gaaaaaggcc tcggttatgg cctcgcaaac ctgctcatgg gtgatccccg
                                                                     480
gcaacagctc ggtgaggttg gtcacgcggg aacgtaccga cgtaatgcct ttcgccgcca
                                                                     540
gtttcttttt atccggattg agatagtttt ccaggccaag gagattaact tggataacca
                                                                     600
cagggttttg gcagtcacca cgatgtacag gtacggacat agaattcg
                                                                     648
```

```
<400> 5527

tggcagacca ggaaaactgt ctcaactttc aggggctgcg ctgcgatgtt tgttatcgcg 60
aatgcccgaa aattgatgag gccatcaccc tggagctgga gcgcaacacg cgtaccggta 120
agcacgcccg ctttctgccg acggttcaca gcgacgcctg taccggttgc ggtaagtgcg 180
aaaaagtatg cgtgctggaa caaccggcaa tcaaggtgtt accgctgtca ctggcgaaag 240
gggagttagg tcaccattac cgcttcggct ggctggaggg gaacaatggc aaatcgtaaa 300
cgtgacgccg ggcgcgaggc gctggagaaa aaaggctggt ggcgcagtca ccgttggctg
gtgttacgtc gcctttgtca gttcttcgtg ctgnggatgt ttttgagcgg tccatgg
```

<sup>&</sup>lt;210> 5528 <211> 380 <212> DNA

<212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (377)...(198)
     <223> similar to gi457174 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5528
atggtaccgc attattacca tgtacgaaga ccagcagcct gataactggc gcgtacaggc
                                                                       60
gatactgtat gcatgagtgt catctacagc aaatgaacaa tgccggatgc ggcgcgagcg
                                                                      120
ccttgtccgg cctacaattt tcacatattt catttagtta atcgaaacca gcgtcgcatc
                                                                      180
agtogtatac gottacacac acactococo ogtogocogo agcaataaat cattotggat
                                                                      240
ctgctctgac aaccgtacgc cgccgcgcgt atctaacatc acctgacacc acgcctgcgc
                                                                      300
cattggcgga gaagcatatt tcaacatttg cgcaccgcaq cccaqcaqqa ataqctqatq
                                                                      360
agtaatctct cgctccactt
                                                                      380
     <210> 5529
     <211> 595
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
    <222> (21)...(472)
     <223> similar to gi1773101 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5529
ccgcttcgac gatttcgtac gttgccgatg ctaaagatgc ggactacttg atcaaacgtc
                                                                       60
atttccgtct atcgccgcgt attttacagg ggcaggcact gcgcgatctg gcaaattcag
                                                                      120
ccatcgatct ctctgacggt ttgatttccg atctcgggca tatcgtgaaa gccagcgact
                                                                      180
gcggcgcacg tattgacctg gcattgctgc cgttttctga tgcgctttct cgccatgttg
                                                                      240
aaccggaaca ggcgctgcgc tgggcgctct ctggcggtga agattacgag ttgtgtttca
                                                                      300
ctgtgccgga actgaaccgt ggcgcgctgg atgtggctct cggacacctg ggcgtaccgt
                                                                      360
ttacctgtat cgggcaaatg accgccgata tcgaagggct ttgttttatt cgtgacgqcq
                                                                      420
aacctgttac attagactgg aaaggatatg accattttgc cacgccataa agatgtcgcg
                                                                      480
aaaagtcgcc tgaagatgag taatccgtgg catctacttg ctgtcggatt cggaagtgga
                                                                      540
ttaagcccga tcgttcctgg gacgatgggc tcgcacgata tcgtcgaccc gggaa
                                                                      595
     <210> 5530
     <211> 646
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (649)...(351)
     <223> similar to gi4062774 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5530
caaaaaaatc atccatccgg ctggtcagca actgtagttg ttaatgtgac agagccattg
                                                                       60
cccatgatag tgtccattaa aaggatggac actatttccc cggaacctca actcgccgca
                                                                      120
caggogttct acatagateg cttccgtttc attgttgact agaactggac atcagataaa
                                                                      180
tegegettta ceettgatgg ageetgtaca taggtggtgt gtaattgeet gettgggata
                                                                      240
tgttcatttc accatcaaat gaaggttaaa ttatggacga caaacaattg caggctcagg
                                                                      300
ctgcgttcag caaagcatcg caaccggcga tagatgcttc attaaattta agattcagct
                                                                      360
tcctcttcag ccacccgtac gccaatcttc aacacttcat tatcttcttt ctcggccacc
                                                                      420
gtccagatca tcccggcaaa ctctacctgg tcaccgacaa ccggtgccgc gcctaacaac
                                                                      480
tgctggacaa tttcacccag cgtttgctgc ttatcacgat attctcgccc gtcttccaqq
                                                                      540
ccatatatca gcgcaacatc agcatatttg gcgctggctt cgagaatgaa gtcaccaaag
                                                                      600
aagcgttgat ccagcgcgac cggcggcgac tggctgaaca gtttac
                                                                      646
    <210> 5531
    <211> 586
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
     <222> (10)...(569)
     <223> similar to gi41625 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5531
aacgacaggt tototgactt aacgocagaa acgotggtta cgcgcaataa agcgcagota
                                                                       60
aaagcgttct gggagaaaca cagcgacatc attcttaagc cgctggacgg tatgggcggc
                                                                      120
gcgtcgattt tccgcgtgaa agaaggcgat ccaaacctcg gcgtgattgc cgaaaccctq
                                                                      180
actgagcatg gcactcgcta ctgcatggcg caaaattacc tgccagccat taaagatggc
                                                                      240
gacaaacgcg tgctggtggt ggatggcgag ccggtaccgt actgcctggc qcqtattccq
                                                                      300
caggggggcg aaacccgtgg caatctggct gccggtggtc gcggtgaacc tcgtccgctg
                                                                      360
acggaaagtg actggaaaat cgcccgtcag atcgggccga cgctgaaaga aaaagggctg
                                                                      420
atttttgttg gtctggatat catcggcgac cgtctgactg aaattaacgt caccagccca
                                                                      480
acctgtattc gtgagattga agcagagttt ccggtgtcga tcaccggaat gttaatggat
                                                                      540
gccatcgaag cacgtttaca gcagcagtaa cccaccttag cgagaa
                                                                      586
```

```
<210> 5532
     <211> 808
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc_feature
     <222> (1)...(734)
     <223> similar to gi581095 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5532
catgttatcg gagacctgcc aacgtatggt tatcgtcggg tatgggcgtt gcttcgcagc
                                                                       60
cagccagaac ttgatggtat gcctgcgatc aatgccaaac gtgtttaccg gatcatgcgc
                                                                      120
cagaatgcgc tgttgcttga gcgaaaacct gctgtaccgc catcgaaacg ggcacataca
                                                                      180
ggcagagtgg ccgtgaaaga aagcaatcag cgatggtgct ctgacqqqtt cqaqttctqc
                                                                      240
tgtgataacg gagagagact gcgtgtcacg ttcgcgctgg actgctgtga tcgtgagqca
                                                                      300
ctgcactggg cggtcactac cggcqqcttc aacaqtqaaa caqtacaqqa cqtcatqctq
                                                                      360
ggagcggtgg aacgccgctt cggcaacgat cttccgtcgt ctccagtgga gtggctgacg
                                                                      420
gataatggtt catgctaccg ggctaatgaa acacgccagt tcgcccggat gttgggactt
                                                                      480
gaaccgaaga acacggcggt gcggagtccg gagagtaacg gaatagcaga gagcttcgtg
                                                                      540
aaaacgataa agcgtgacta catcagtatc atgcccaaac cagacgggtt aacggcagca
                                                                      600
aagaaccttg cagaggcgtt cgagcattat aacgaatggc atccgcatag tgcqctqqqt
                                                                      660
tategetege caegggaata tetgeggeag egggettgta atgggttaag tgataacaga
                                                                      720
tgtctggaaa tataggggca aatccaataa acaattggaa tttacttcca ttgatctgtt
                                                                      780
tactcagtgg ttgtcacgtt ttcgagga
                                                                      808
    <210> 5533
    <211> 384
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (385)...(238)
    <223> similar to gi1736484 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5533
gagatggaaa aactaacagc tgacattgtt gcctggcggc ggccctcaca aactccagat
                                                                       60
gatgagetae etgtteggtg agtgaggttt taegaggete atattgeget getgeaaett
                                                                      120
tccagaacga cataatgact tccttttcaa aatgactgca aattatgagt gcggtttaga
                                                                      180
aaatactcat aatttagcag gcgttatgta agaaagtgta actctgtata agttttattt
                                                                      240
aagtttgqgc tcgtaaggta aacgtgacag attgaccgaa gccaaacggt gggcaataag
                                                                      300
ccgctcgcga aaccagctgc gcaaatgttc aggctgttca cgttcaaccg cttcagcgat
                                                                      360
caccggcata ttgtagcgtt cttt
                                                                      384
```

<220>

```
<210> 5534
     <211> 1542
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (40)...(523)
    <223> similar to gi665970 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5534
tttcgtgtgg actggggccg gataatggcg ggcgctgcag aagatgcgcg agctcttttc
                                                                     60
cgggctgggg tctgcgcggc cctggaggcc tggccggcct tgcagatcgc tgtggagaat
                                                                    120
ggcttcgggg gtgtgcacag ccaggagaag gccaagtggc tggggggtgc agtggaggat
                                                                   180
tacttcatgc gcaatgctga cttggagcta gatgaggtgg aagacttcct tggagagctg
                                                                   240
ttgaccaacg agtttgatac agttgtggaa gacgggagtc tgccccaggt gagccagcaa
                                                                   300
ctgcagacca tgttccacca cttccagagg ggtgatgggg ctgctctgag ggagatggcc
                                                                   360
tcctgcatca ctcagagaaa atgcaaggtc acagccactg cacttaagac agctagagag
                                                                   420
actgatgagg atgaagatga tgtggacagt gtggaagaga tggaggtcac agctacgaat
                                                                    480
gatggggctg ctacagatgg ggtctgccc cagcctgaac cctctgatcc agacgctcag
                                                                   540
actattaagg aagaggatat agtggaagat ggctggacca ttgtccggag aaaaaaatga
                                                                   600
gtggggatga ttggaaatgg ctttgggccc ttatttgctg ttctaagagt tgtctgtagg
                                                                   660
ggttttttt tttgaggatt gaagacctgt gggacttggt taccccatct ccaccctctc
                                                                   720
ccctgttcct ctgtctggct ccctccaggg caaggaaaac ctagggtcct tggtcttggg
                                                                   780
ggtgggggga ccttttccag catattcccc tgggccttta gttaacatcc gagtgacgaa
                                                                   840
gccgggttcc ccagtacagt gtcttttggg tqcqqtcatt qtqaqqaaqq qqatqaqtqa
                                                                   900
gtgtgggtgt ggctggagga ggagctagat gccggtggac agtgggcagg tggatttggg
                                                                   960
gaggagagga tcagcagcag cagcagtact cagtgatagg gggctggctg ggtcaggaat
                                                                  1020
ggtgagatga acatgcaagt ggaagagaga atagttgaaa atgtgaatga aagtagctct
                                                                  1080
ggagcctctc ccttacccca ccccacacac acgcaacagc tctgtacccc tgcccagaac
                                                                  1140
1200
ggaattcgaa gaccttggct aggtggtgag cttggaagag ctqqqctttq ttttctqtct
                                                                  1260
cctctaacct ctttccttac tccttatccc atcccatttg agttcagggg tgaggcttaa
                                                                  1320
gatettaata aataataeet taetgettaa tetgtggett gaeetgtgag tagtageett
                                                                  1380
agaatcagcc ttctgggagc tcagcttcag agtttacaag ggagcagttt ctgggcccac
                                                                  1440
cctagcagcc tgggtacttt ggacaaccaa acagatgaac gaacggagca cagcagtgct
                                                                  1500
atgaaagtta ctgtaagcct gaaaataaac tggtatttt ct
                                                                  1542
    <210> 5535
    <211> 1072
    <212> DNA
    <213> Homo sapiens
```

```
<221> misc feature
     <222> (1)...(1073)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (142)...(359)
     <223> similar to gi3878319 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5535
ggtggaattc ctgcgtacta cggcttcttc cagtcacctc ggcccggatc gggaagtgtc
                                                                     60
aagcgggcgc teeeceatet eegeegetat taccaetgaa eeeggaeeee etacceaggt
                                                                    120
180
ctctttgttt gcacctgtgc ctacttcaag aaagtacctc gtctcaaaac ctggctgcta
                                                                    240
tcagagaaga agggtgtttg gggtgtgttt tacaaagccq ctgtgattgg aaccaggctg
                                                                    300
catgctgctg tggcaattgc ttgtgttgta atggcctttt acqtcctgtt tataaaatga
                                                                    360
attccaaagc acccaagtca tcaactgcca accaagggga cggggatgaa gaacctgttg
                                                                    420
gagacctgaa cccagtgtag gagagttcag ctgaaatcat cggtccccag gatgacacca
                                                                    480
cagcatctgc ccctgctata tgtggggaaa actcatggtc acgaacatta tttatgcttc
                                                                    540
aggggactac agaaagccag cttcctttga tctatgtgta aatcagtcct tggcagagtg
                                                                    600
catataatgt ccggataaat tacacccctc ggtgataaga ttacatacct ccttcataaa
                                                                    660
aacctgtcat cctgttttgt tcttcagctc ctcatcagga tcttttcaaa ctgaggctca
                                                                    720
ttagggaagg aactaggctg tgttcagact tcttttgaag agagagaatt ttcaagactt
                                                                    780
cttttcactc tttgatttgg atctggcaaa ttggggaggg gatgctgggt gggaaacagt
                                                                    840
tatgaaaatg ccaaagaaaa ttctttggct ttagaaaatt ttatcctttc atggtaaccc
                                                                    900
atccggggaa ccttaaaaga gagggcatag tgcttcattg gcaaaaagag gaacagatga
                                                                    960
agtagctgtg tttatgtggc tgggtatctt tgagagtttt tgcccaagga aantctgggg
                                                                   1020
cctacataaa tttggggatt tttccgtgtg gtggggaccc ggaaggcgtg gc
                                                                   1072
    <210> 5536
    <211> 989
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (876)...(526)
    <223> similar to gi577311 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5536
tttttttttt tatctttctg ttctctgttc attgaacatt ggtttttaag gttccaaacc
                                                                    60
tactaaatga aaagtggaat gaatggtact tgtagcttgg atttaactca attttgaata
                                                                    120
ttgtcaatct agtacaattt cttaaattta gcttaagata tctgcaaagc caacaatgtt
                                                                   180
tctaagacaa gatgaggtta cgggcttcaa tcaataagaa aaataaaaaa gcaattaatt
                                                                   240
tattatttgg aacccaccag gtcattatgc attaattttt aaatactgca acttcatgtt
                                                                   300
```

```
ttatagaaac tagaaacatg attcaaaatg tcacaaagtt atattaaatt aaaaccactt
                                                                      360
tagacaattc aaggtctcac tgaccaaagt ccattaaggt gacagttttg ctgttttgtt
                                                                      420
actggttccc acatgatatc atctcttctc aatttcattt gaagattatg aactcgtatt
                                                                      480
ggatgaaagc tgctgttttt ctgaaaaagg ttagtgtcag tcaaacattt tctggggcta
                                                                      540
ttttttatgt tctttgatcc tttagggtag ctgtcttctt gctgaatacc tgaagcttca
                                                                      600
ctcatctttg agttttgaac tttttgctgc agtttacaga cactgtcttg atgcttcttc
                                                                      660
aqtttggaga tttgttctcc tttaatttcc attttcttga gtaaacactc tagttcacat
                                                                     720
tctatgtcgt cacagactga atgactttca gtttccttca tttgtttcag tagttcttgg
                                                                     780
tgctccatgc tcatttggtc cagctcatct tgcattgcca tcaaaagttc agataaattg
                                                                     840
tcacaaatgg aaatggactt ttctgagtca ggaggaatag ctttacacca ggaagttgtt
                                                                     900
ctagaaggct tggggagaca tctagtctca gtcacgttaa aaggtttctg aaggatatgt
                                                                     960
gggtcacgat gttgcctcat ctgcaaaaa
                                                                     989
```

```
<210> 5537
     <211> 322
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (308)...(112)
     <223> similar to gi5689427 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5537
ctacatggtc cctctcatga gtctctgtgc cagaggttgg tggggggaagg gagaaaggaa
                                                                       60
aggagggaga ggatgtcact gtcctcaaac cgagcttctc tgctccatgc tatcctgggg
                                                                      120
gcttcaggtg aatggctgcg ctgttggggc gagcagccag gatgtagagg acattctctt
                                                                      180
qcaggaaggt aggccagtcc acaaatctgg actcctgctc tgtgggcagc agggtcttgt
                                                                      240
cctgactctt gctgctgctg ctggctgggc tgctatctgc gatgggaccc acatggctga
                                                                      300
tgctgacacg aaatcgtcga cc
                                                                      322
```

```
<210> 5538
<211> 1825
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (628)...(1595)

<223> similar to gi2589223 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5538
ctcttttatt cccttttcga cgatttcgcg ggacatgaca gctttaaccc atgactcaaa
                                                                       60
gtctcaggga ataatacaca gtgttgaaat gcctctcttg cctaccaggt ctcaagtttg
                                                                      120
acatgaaata catgaacttc cgtgtgaagg cctgtcacaa qqcaqttqca qqaqagttct
                                                                      180
ctgagccggt gactctggag acaccaggtg actggaatcc cagcactttg ggaggccgag
                                                                      240
gcgggtggat cacttgaggt caggagttca agaccagcct ggccaacatg gagaaaccct
                                                                      300
gtctctacta aaaatataaa aaattagccg ggccatggtg gctcacgact gtaatcccag
                                                                      360
ctactcagga ggctgaggca ggagaatcgc ttgaaccagg gagtcggagg ttgcagtgag
                                                                      420
ccaagatcgt gccactgcac tccagcctgg gtgacaagag caagactctg tctctaaaaa
                                                                      480
aaaaaaagtc tcccccctgc caaacatgga acccctttgt ggccatgccc ccaaaattgt
                                                                      540
ccaacatgtg gttgggcagc cctgcaggaa gccccctgcc ccctgaacca ggcacagaat
                                                                      600
cccgaccccc tctcctttcc gtcttggtca gggcccagcg cacccgggat cgacctggct
                                                                      660
gagtccctgg tggcagataa ctgtgtgacc ctggtgtggc gcatgccgga tgaggacagc
                                                                      720
aagattgace actaegtget ggagtacegg eggaceaact tegagggeee geeegeete
                                                                      780
aaggaggacc agccctggat ggtcatcgag ggcatccggc agacagagta caccctgaca
                                                                      840
ggtctcaagt ttgacatgaa atacatgaac ttccgtgtga aggcctgtaa caaggcagtt
                                                                      900
gcaggagagt tetetgagee ggtgaetetg gagacaceag eqtteatqtt ecqeetggat
                                                                      960
gcgtccacat cccaccagaa cctgcgggtg gatgatctct ccgtggagtg ggacgctatg
                                                                     1020
ggcgggaagg tgcaggatat caaggctcgc gagaaagatg gcaaggggcg gacggcgtct
                                                                     1080
cccatcaact ccccagccag aggtactcca tctcccaaga ggatgccctc aggtcgtggg
                                                                     1140
ggacgggacc gcttcaccgc tgagtcctac acagttctgg gggacacgct gatcgacggc
                                                                     1200
ggggagcatt actgggaggt gcgctacgag ccggacagca aggcgttcgg cgtgggcgtg
                                                                     1260
gcctaccgca gcctgggccg cttcgagcaa ctgggcaaga cggccgcctc ctggtgcctg
                                                                     1320
cacgtcaaca attggctgca ggtcagcttc acggccaagc acgccaacaa ggtcaaggtg
                                                                     1380
ctggacgccc ccgtgcccga ctgcctgggt gtgcactgtg acttccacca aggcctcctg
                                                                     1440
tccttctaca atgcccgcac caaacaagtg ctgcacactt tcaagaccag gttcacacag
                                                                     1500
ccgctgctgc ctgctttcac ggtatggtgt ggcagcttcc aggtgacgac aggcctgcag
                                                                     1560
gtccccagtg ctgtgcgctg cctgcaaaag cgaggcagtg ctaccagcag ctccaacacc
                                                                     1620
agcctcacct aggcccccag gcacccaccc agctggggtg tttttggggg agtcgccgcc
                                                                     1680
aagcccaggc tgctggagcc aggcaccctc ctctgtcact tgctgcttgg agccttaact
                                                                     1740
ccagatgggg gggtcaccaa gagggagtgg gcaccctggc gggccctctc cccacctcac
                                                                     1800
ctcttaataa aggtcagaca ctggc
                                                                     1825
     <210> 5539
     <211> 2802
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1256)...(2063)
     <223> similar to gi1903458 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5539
gcggccgcgg gcgggaggtg cttcccaagg accgtagatg cctctctaga gcatgagctc
                                                                       60
aggcaagagt gcccgctaca accgcttctc cggggggccc agcaatcttc ccaccccaga
                                                                      120
cgtcaccaca gggaccagaa tggaaacgac cttcggaccc gccttttcag ccgtcaccac
```

catcacaaaa gctgacggga ccagcaccta caagcagcac tgcaggacac cctcctcctc

cagcaccett geetacteec egegggaega ggaggaeage atgeeceeca teagcactee

180

240

300

```
ccqccgctcc gactccgcca tctctgtccg ctcccttgca ctcagagtcc agcatgtctc
                                                                      360
tgcgctccac attctcactg cccgaggagg aggaggagcc ggagccactg gtgtttgcgg
                                                                      420
agcagccctc ggtgaagctg tgctgacagc tctgctgcag cgtcttcaaa gaccccgtga
                                                                      480
tcaccacgtg tgggcacacg ttctgtatga gatgcgcctt gaagtcatag aagggcgccg
                                                                      540
tggacaacgt caaactgacc gcggaggtga acaacatcac ggtggccgag cagatcgggg
                                                                      600
agctcttcat ccactgccgg catggctgcc gggtagcggg cagcgggaag ccccccatct
                                                                      660
ttgaggtgga cccccgaggg tgccccttca ccatcaagct cagcgcccgg aaggaccacg
                                                                      720
agggcagetg tgactacagg cetgtgeggt gteccaacaa eeccagetge eeccegetge
                                                                      780
tcaggatgaa cctggaggcc cacctcaagg agtgcgagca catcaaatgc ccccactcca
                                                                      840
agtacgggtg cacgttcatc gggaaccagg acacttacga gacccacctg gagacttqcc
                                                                      900
gcttcgaggg cctgaaggag tttctgcagc agacggatga ccgcttccac gagatgcacg
                                                                      960
tggctctggc ccagaaggac caggagatcg ccttcctgcg ctccatgctg ggaaagctct
                                                                     1020
cggagaagat cgaccagcta gagaagagcc tggagctcaa gtttgacgtc ctgggacgaa
                                                                     1080
aaccagagca agctcagcga cggacctcat ggagttccgg cgggacgcat ccatgttaaa
                                                                     1140
tgacgagetg teceacatea aegegegget gaacatggge atectagget ectacgaece
                                                                     1200
tcagcagatc ttcaagtgca aagggacctt tgtgggccac cagggccctg tgtggtgtct
                                                                     1260
ctgcgtctac tccatgggtg acctgctctt cagtggctcc tctgacaaga ccatcaaggt
                                                                     1320
gtgggacaca tgtaccacct acaagtgtca gaagacactg gagggccatg atggcatcgt
                                                                     1380
gctggctctc tgcatccagg ggtgcaaact ctacagcggc tctgcagact gcaccatcat
                                                                     1440
tgtgtgggac atccagaacc tgcagaaggt gaacaccatc cgggcccatg acaacccqgt
                                                                     1500
gtgcacgctg gtctcctcac acaacgtgct cttcagcggc tccctgaagg ccatcaaggt
                                                                     1560
ctgggacatc gtgggcactg agctgaagtt gaagaaggag ctcacaggcc tcaaccactg
                                                                     1620
ggtgcgggcc ctggtggctg cccagagcta cctgtacagc ggctcctacc agacaatcaa
                                                                     1680
gatctgggac atccgaaccc ttgactgcat ccacgtcctg cagacgtctg gtggcagcgt
                                                                     1740
ctactccatt gctgtgacaa atcaccacat tgtctgtggc acctacgaga acctcatcca
                                                                     1800
cgtgtgggac attgagtcca aggagcaggt gcggaccctc acgggccacg tgggcaccgt
                                                                     1860
gtatgccctg gcggtcatct cgacgccaga ccagaccaaa gtcttcagtg catcctacga
                                                                     1920
ccqqtccctc agggtctqqa gtatggacaa catqatctgc acgcagaccc tgctgcgtca
                                                                     1980
ccagggcagt gtcaccgcgc tggctgtgtc ccggggccga ctcttctcag gggctgtgga
                                                                     2040
tagcactgtg aaggtttgga cttgctaaca ggatccaggc caggctgtgg tttcccctga
                                                                     2100
accagecetg gacetteetg agecaggetg gecacatggg gtggtetegg ggtttetgee
                                                                     2160
tgccccgtgg gcataggtgg acaggctctg gcagccgggc agtgccctcc ccgtcccatg
                                                                     2220
ctcggcgagc ctccctctac tcggcactgt ccttgctgcc cagcccctct ctgggtgcca
                                                                     2280
ggtacgacgc ttgccccggc ccaccctcca tccccaccct ccatccccac cctagatgga
                                                                     2340
gcgagggcct ttttactcac cttttctacc gtttttagac tgtatgtaga tttggttacc
                                                                     2400
tectggttga aataaatget ecacagactg tggetgtgag tggggacage teetegggae
                                                                     2460
aagggggctg tgtgtggcct tgaggttggt gtgcacaggc actggctgct gtgagtggg
                                                                     2520
gggcatgggg cagtttcctt tggtggaccc caggacttcg gcccactccg gggcctcccc
                                                                     2580
tecetgetag gaggeaacte gacacacca agetgetgge etceagtece atetececca
                                                                     2640
acacattgtg ccccaaaaaa gtgagccagg cacctctgtt tcctgctgtt tattgacagc
                                                                     2700
cgacggagac gccttgccca gacctcccct gcccacctgc tggagcccag cctgtgccgc
                                                                     2760
cctctgagga gaggcctggg gggacagctg ggcacqtcca ct
                                                                     2802
```

```
<210> 5540
<211> 1833
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(1059)
<223> similar to gi5706505 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5540
gcggccgccc cctcgcccgt cacgcacggc gtttacagac tctcctgcgg caggcggtgg
                                                                       60
aactacaaag ggatcggtgc ctatatcaca ataccaaact tgataataat ctagattctg
                                                                      120
tgtctctgct tatagaccat gtttgtagta ggaggcagtt cccatgttat acqcagcaga
                                                                      180
tacttacgga gcattgtaat gaagtgtggt tctgtaaatt ctctaatgat ggcactaaac
                                                                      240
tagcaacagg atcaaaagat acaacagtta tcatatggca agttgatccg gatacacacc
                                                                      300
tgctaaaact gcttaaaaca ttagaaggac atgcttatgg cgtttcttat attgcatgga
                                                                      360
gtccagatga caactatctt gttgcttgtg gcccagatga ctgctctgag ctttggcttt
                                                                      420
ggaatgtaca aacaggagaa ctaaggacaa aaatgagcca gtctcatgaa gacagtttga
                                                                      480
caagtgtggc ttggaatcca gatgggaagc gctttgtgac tggaggtcag cgtgggcagt
                                                                      540
totatcagtg tgacttagat ggtaatctcc ttgactcctg ggaaggggta agagtgcaat
                                                                      600
gcctttggtg cttgagtgat ggaaagactg ttctggcatc agatacacac cagcgaattc
                                                                      660
ggggctataa cttcgaggac cttacagata ggaacatagt acaagaagat catcctatta
                                                                      720
tgtcttttac tatttcaaaa aatggccgat tagctttgtt aaatgtagca actcagggag
                                                                      780
ttcatttatg ggacttgcaa gacagagttt tagtaagaaa gtatcaaggt gttacacaag
                                                                      840
ggttttatac aattcattca tgttttggag gccataatga agacttcatc gctagtggca
                                                                      900
gtgaagatca caaggtttac atctggcaca aacgtagtga actgccaatt gcggagctga
                                                                      960
cagggcacac acgtacagta aactgtgtga gctggaaccc acagattcca tccatgatgg
                                                                     1020
ccagcgcctc agatgatggc actgttagaa tatggggacc agcacctttt ataqaccacc
                                                                     1080
agaatattga agaggaatgc agtagcatgg atagttgatg gtgaatttgg agcagacgac
                                                                     1140
ttctgtttaa cttaaaatta gtcgtatttt aatggcttgg gatttggtgc aaacaaacat
                                                                     1200
gattgatage tggacagaca tgctegteat gaaaaaagaa ecatttetga agecegattg
                                                                     1260
gggccaaaca tttacacctt gcttcatagt aaccagttga gatgaagcac gtcgttagaa
                                                                     1320
                                                                     1380
cgttgttgga caccatgttg aattattccc ccatcggttg tgaagaactg tgctacattc
aggettacce attgaactea gtatatatat tttttteett eetgtetttt gtetggeagg
                                                                     1440
ataccattct tgttgctctt ctgtgtaatg aagtttaaat gcttgtttgg aaaactttat
                                                                     1500
ttaacagttt agaaggcttg atagaaagag tgcattagtc tgaagagtat acattggata
                                                                     1560
ggaaagaatt teettetttt gttteteeaa atettteege ettatttage ttgagatett
                                                                     1620
tgcagcttgg ttcatggatt ctagccttgc ccgttgcgca gtatatactg atccagatga
                                                                     1680
taaaccagtg aactatgtca aaagcactct caaatattac attttggaca aaaagttttg
                                                                     1740
tacttttcac atagcttgtt gccccgtaaa aaggggtaac agcacaattt tttaaaaata
                                                                     1800
aattaagaag tatttatagg attaaaaaaa aaa
                                                                     1833
```

```
<210> 5541
<211> 1251
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1194)...(366)

<223> similar to gill77358 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5541
tttttaagag gttcatgaca caaatatatt tatattaggt gaatcaatca cccaggatac
60
```

4051

```
ccaagatctg atactttcac aaactgcttg gaggcaactt aagtatggaa gaagcttcag
                                                                      120
aaccagccca gctttctgct ctctggctcc aggctgcatc ctttttaact atttaatgtg
                                                                      180
gcgtggaaaa tgtcagcata atgaggcttt ctcatctcaa tagagaacct aggaaggaca
                                                                      240
aggccgaatt aaaaaaaaa tcttcattaa agaatttaat agggagttga ttatgttgta
                                                                      300
gaatcatatc gtcctattct gtgacacatt agaaacataa actttagggc tttttcatct
                                                                      360
ccacagcata gaggtctgat cgcttctgtc taaaaacggg gatttgctgg cgtatttcag
                                                                      420
ccagcttctt caggtctatg tctgaataca cgattgcttc ttctgtgcca gctttggcta
                                                                      480
gaacctcccc ccaagggttc accacggtgc tgtgtcccca ggcaacatag gaggctttgt
                                                                      540
catcccgggc aggagaggct gtggccacat acacctgatt atcaacagcc cggcttcgct
                                                                      600
gaagtaactc ccaatgggct ggtccagtgg tcagattaaa agctcctgga tataccaaca
                                                                      660
gctggcagcc tctctgtgcg tagatttgtg caagctctgc aaaccgcatg tcgtagcaga
                                                                      720
tgcccagacc cactctgcag taaggagtat caaatgtgga gaaactatca cccggactca
                                                                      780
atgttttaga ttcttgaaat gtaatttttc caggaacatc aatgtcaaac agatggatct
                                                                      840
ttctatactt tgctagtaaa gttccatcag gcccaaacac agcacaggtg ttatataatt
                                                                      900
tcccagcatc ctcttcaggg atagagcctc caatgagata tatgctgcat tcctttgcta
                                                                      960
cttcagaaag cttctgtgtg gattcaccag gaattttctc tgcatattca ggaaaatatt
                                                                     1020
tegetecata tggagaatta aageatteeg geaaagaaae tattttgget eettgegttg
                                                                     1080
ctgcctcccg gatgaagcta caagcgcgag tgacgttatc tgatttgatg gaagaaatct
                                                                     1140
gaagctggat gagggccaag cggaaagagg tcatgactct gcagacaagc accacctgcg
                                                                     1200
gcgcggaatg agcgctggag atccggcgga ccgcggcgtc gctacacgaa a
                                                                     1251
```

```
<210> 5542
<211> 1553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1324)...(641)
<223> similar to gi3878106 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5542
tttttttttt ttaagtttga agccttgccc aagctttaat gtcatgctaa ccagttacct
                                                                       60
tgttagaget gggaageeae ettttgetea aaatgeagae ttetgeettt gaaaacaeae
                                                                      120
cacacctgat tttaagtgct taaaggacag aaaatgtcgt tgctttaaat tgttgctttg
                                                                      180
ttcagagaca tctggatttg ctgtatccat acaagcaaaa gcttttccaa ttccagaatc
                                                                      240
aacccacact aatttgttat tgcctcgtac tgtattggcc cagctgtaat caactcagca
                                                                      300
ggcttttggt tgtaaattca agtggaaatt gagttggtct tatttgtgcc cgttgatatc
                                                                      360
tgagggctgt gaggaagatg gccagtaggt caaagggaat agtgttgaaa agctgaccag
                                                                      420
tactgggcag gtggccggct gtccctcagg caccacaacg ccgagccacg gtaaggggca
                                                                      480
tgagccacat ttgcagaata tagccagagt ccttccagaa cctcctgatt cgcgccagga
                                                                      540
ggcatcccag ggcacacaag tgtcaagggc ctactcaggt gcttggcaga gctctctgtg
                                                                      600
tgttattaac agaagaggct acggcttaga gtggaaagga gcatgtgatg gctagcggtg
                                                                      660
ggcagcctgt gtactctgcc aagtttgggt ggtccaggtc cccacgattt ctgtgtggag
                                                                      720
ggttgtccgg catctggcca ctaggggggc cggtggttct cacacacacg cagcggggct
                                                                      780
ccttagcacc tggcttatac agcttcctgg ggacgccaat ccagtctctg ctcacacctc
                                                                      840
cactettetg ggageaceag ageeggetge ceetggetga getecaetee gegttgeacg
                                                                      900
gcgggaatgt ctgcttctct tgcagctgta gtttgttggc ctccaagcct ctggtgatcq
                                                                      960
cagcttctac ctgggtcagt gccggggtgg gcagcccatc ctctccgtag aaccgtcctg
                                                                     1020
```

```
tcaccctccc aacacaca taattcttct catagaatga aagccaattg tgaagtgtca
                                                                     1080
gcatctcagc ggctgacagg tcggatacgt catccacgag gcctgcttca gaacagtccc
                                                                     1140
cggtcacgaa agctctggat gcgtctcggc ctgcgaagcc gctatagtgg gacccaggct
                                                                     1200
cgtagtgcct ccggccggag gacacatcgt agacacggcc gagcaacgcc aagtacaggc
                                                                    1260
ccgggtcccc tgggccgccg cggtagcgag acagctcctc cggtatgaaa aggcgaaagc
                                                                     1320
cagcgcgggg accccaccag cccataagcc gtgctgccat taccgctgct gcggctacag
                                                                     1380
ccaggcccaa caaaagccca cggcctccgc acctcaacat ctatataggc ccacccgctc
                                                                    1440
cgcacttccg aggttgccgc ctctatctac agctaagatg qccgagacgc cgagcqtgac
                                                                    1500
gtcatcggcg cgcgcgctct cgctctctct ctcgcgcgct agtgctcqcq ctc
                                                                    1553
```

```
<210> 5543
<211> 1516
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1094)
<223> similar to gi5911963 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5543 gcaaagcgca aaaagataaa tcagaattca agtaaagaga agattaataa tggacaagaa 60 gtcaaaatcg atcagagaaa tgttaaaaaa gagttcacta gccatgcttt agattctcat 120 atcttagatt attatgaaaa tccagccatc aaagaggatg tatcaacatt aataggtgat 180 gattttggcat cttgcaaaga tgagactgat gaaagctcaa aagaagaaac tgagcctcaa 240 gtgctgaagt ttagagtcac atgcaacagg gcaggagaga aacattgctt tacctcaaat 300 gaggctgcaa gagattttgg gggtgctgtt caagattatt ttaaqtqqaa qqccqacatq 360 accaactttg atgtggaggt tcttttgaac atccatgata atgaagtcat tgtgggcatt 420 gcattgactg aagagagtct ccaccgaaga aatataacac attttggacc tacaactctt 480 agatcaactc ttgcctatgg gatgctcagg ctctgtgatc ctctacctta tgatataata 540 gtcgatccaa tgtgtggaac tggggcaata ccaatagagg gggccactga atggtctgac 600 tgcttccata ttgctggtga taataatcca ctggctgtga atagagcagc aaataacatt 660 gcatctttat tgaccaagag ccaaattaaa gaaggcaaac cctcctgggg cttgcccata 720 gatgctgttc agtgggatat ctgcaatctg ccattgagaa ctggctctgt ggatattatt 780 gtaacagatt tgccatttgg aaaaaggatg ggatccaaga agagaaactg gaacctttat 840 ccagcttgcc tacgggagat gagccgtgtc tgcacaccta ccacaggccg agctgtacta 900 cttactcaag acacaaaatg ctttaccaag gcgttatctg gaatgcgaca cgtatggcga 960 aaggtggata cagtctgggt gaacgttggt ggtcttcgtg ctgcagttta cgttctgata 1020 cgtacacctc aagcttttgt tcatccttca gaacaagacg gagaaagagg aactctttgg 1080 caatqcaaaq aatqaagatg actaatagta cttgtacttc ccaccactgg aaatgttagc 1140 ataaaagaac ttggagagga aaaaagtatt aacaaaactg cagtctgcac tctttaaacc 1200 tgtttaaggc tcttcatcct ggttagcaaa aggtgtgaat gtaatgtgat ggaatttaaa 1260 agttttatga gaccaggcac agtggctcac gactgtaatt ccagcagttt aggaagccga 1320 agtgtgcaga tcacctgagg tccggagacc aggcctggcc aacatggtga aaccctgtct 1380 ctactagaaa tacaaaaatt agccaggtgt ggtggcgggc gcctgtaatc ccaactactc 1440 aggaggetga ggetagagaa teaettgaae eeageaggee ggaggttgee ggtgaagteg 1500 agatcacccc attgca 1516

```
<210> 5544
     <211> 492
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (394)...(280)
     <223> similar to gi4589248 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5544
ccgtggccct gcagagcact ccctctttt ttctagaggc aggaaacagg tccagagagg
                                                                       60
ttcggtggct gtccagtagt tttagtagga agtaaggaag taggaaggta gaagctgaat
                                                                      120
ctaggtagga ctgtgggctc tcgagtgcgt caacttaaca ccattgccca tttcagcacc
                                                                      180
aactcccctg tccctccaga tggtgtggtc ctcgagggca gactaatccc atcaggcctt
                                                                      240
ttcaggcctg gcctccctgg cccaccctgc ttagcacctg cggatctcag gggccagctg
                                                                      300
ctccatgtcc tggtggaaga cgtagggagg gttgctgaca atcaggtcca tggggcccca
                                                                      360
gggcaggtgt gtccagctcc tttctgtcgt caaagaagag gacacacagt agggactaac
                                                                      420
ccattgggag gtaaaggatg atagctccac ctgccaccat gtgcctctca ccatgccaca
                                                                      480
ccttgggcct gc
                                                                      492
    <210> 5545
    <211> 2081
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (37)...(567)
    <223> similar to gi3298607 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5545
cgaccatgct taccgattca ctggccgtcg tgactggtga accatcaaaa gagagtgata
                                                                       60
gaatctggcc cagaccattt gaatgacaat gaatatacca agtttattcc tcctaattat
                                                                      120
cacacacctc cttatctcac tggtgagcca gaggtaactt accaccgatt aaggccacag
                                                                      180
gataagtttc tggtgttggc tactgatggg ttgtgggaga ctatgcatag gcaggatgtg
                                                                      240
gttaggattg tgggtgagta cctaactggc atgcatcacc aacagccaat agctgttggt
                                                                      300
ggctacaagg tgactctggg acagatgcat ggccttttaa cagaaaggag aaccaaaatg
                                                                      360
tcctcggtat ttgaggatca gaacgcagca acccatctca ttcgccacgc tgtgggcaac
                                                                      420
aacgagtttg ggactgttga tcatgagcgc ctctctaaaa tgcttagtct tcctgaagag
                                                                      480
cttgctcgaa tgtacagaga tgacattaca atcattgtag ttcagttcaa ttctcatgtt
                                                                      540
gtaggggcgt atcaaaacca agaatagtga gtggctcttt cactggcaat tctcaaatga
                                                                      600
```

```
tacacattta aagggcagat ttttttaaaa agatactact ataataaaca tttccagttg
                                                                      660
gtcattctaa gcatttaccc ttttgatact ctagctagtc aggtactcca aattgacttt
                                                                      720
gcagcagggt ggcagggtca ggagagtctg gtcctgccta qctcagattt catqqcacct
                                                                      780
gccacttgaa gcaagtcact tctttatcac aggtgtcttg aaacattagc ttcttttacc
                                                                      840
aacctgagaa aattaggatg acctggcaaa taagatcttg aataggccaa aagcaagtat
                                                                      900
cttgctgtgt gtagtctctt ggttaaagtg aagaaacagt actgttcaca cctttcttca
                                                                      960
ctgagattcc agtgtacatg agaacatata tttattgcat gattttctag atacacagtc
                                                                     1020
tatgcattat tcatatacat ttattttagc ctaaagtggt tttcaaatcc agttcttcaa
                                                                     1080
gccataaatg accaagatcc aagcaatctg aatttgtttt tgtgattatt tgactggaat
                                                                     1140
gcttcttaag tggaataact atactccgtt atccacccga tttcctaatg taattgaaag
                                                                     1200
attttctatt ttgccacaca cttggagaca ataagggttt ttagttttat ctactcttct
                                                                     1260
attgaagtta aagaaaaaa aaaagatttt tttatttgta ttaatgaaaa gctttagttt
                                                                     1320
aaaataagga gatccagaat aaaaagaaga gactgatctc ttcaattatt gtcatctgta
                                                                     1380
gccaccagca catcactctt atgtaatccc caaaggcttg gcatgccgta agtgtgtggt
                                                                     1440
gggtagactg ctgccgggga atcgtacttc ttatttagta atgataaqac ttttcattat
                                                                     1500
ttttggaatt ttaaagatga cataaataag tttaaatatc aatttgggga gtaaggttta
                                                                     1560
atattgccat cgggtattga gacaggagga agtttctgtt tttctccatt tagacatagg
                                                                     1620
tcaattaaaa tatttgggtt taaaatgact aaatgcttta aacatattgt agcttaagat
                                                                     1680
atatgtgtta agatatatac atgagaaact ttaaaaggta actactgtgc atgcctgatg
                                                                     1740
cttaatagaa tacttagtgg catcaaatgt ttgcagcagt ctccataatt atattcagtc
                                                                     1800
ccttctaata ctgtatcaat gtaaatgaaa taaatatatt caaattggct ttttgatatg
                                                                     1860
catcaagtgg cattttgttc ctgtgtttaa tagtgatctg tatacagctg tgcacatatt
                                                                     1920
gtcatcactt attctagcat cactgttaag gctgtgatta tgtttgatat tcacctggat
                                                                     1980
tttaatacaa gccaatatca gcttcccatt gtgtaataac ttgggtgttt aggagtcttt
                                                                     2040
tcacattttt tggggatatg aactagatgt tcaagaactc c
                                                                     2081
     <210> 5546
     <211> 3018
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (3019)...(1219)
     <223> similar to gi5817280 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5546
aageteacag caaagagaag ggteetgaaa geaagttgee agttgeeeee tteacagttg
                                                                       60
aatacaaggg tgtaaggcac gaatttctgg tggctccacc ccatccttcc agtqtqcctq
                                                                      120
tgggccctta gtctgagcca ctccatatta atttatatcc cttgctgtgc atatgttacg
                                                                      180
gaatggaatt ttccacgtgg acatgtttag gcaatccccc ctttgcaagt tcccttatct
                                                                      240
gcacaaagca tctcatgctg tggagccagt ggcaggttct ccgggaccct tcccttactg
                                                                      300
tetgeetaaa geaaactgge taaattettt cacaagtttt tettttett tttttettt
                                                                      360
ttetttettt tttttttee aatttgeatt agaaagettt tattgagace aggttaacea
                                                                      420
gtggcctgaa aatattacag gctgaaggaa ggctgaggaa accagtatga aggcagctca
                                                                      480
aatgatgaac taaatatatt ccaaaggtac tatttatact taaggcagtt ttaaaagtga
                                                                      540
ggtcttaacc aaaaagcctt tacatggcat tcaaaacaaa aacaaaaaca aaaaaaacac
                                                                      600
```

660

720

gggggggggg ggggcactta aatctcttgg attqactaaa aqaqctaaat tatqtaccca

aaatctgtac agcaggggcc tgttttcagc aggaaagcct atgtacaagt aagaacctct

```
tactcttgta acattgtcct gttttgtttt gtcttataag aatatataac tcctatcctc
                                                                      780
acagagttag tocataaggo otcagtgaco toacagaaat atggagttaa cototactac
                                                                      840
agaactattt acactgcact gtaaatacac atatgtgtgt ccaccctcac agctaagctg
                                                                      900
tcaatgcctt gagtgaaggg gttacagctc attcgttttg catctacagt gacaatgaat
                                                                      960
aggcactcaa tacatacttt tttttgcatg aatgataaat gaaatgattt tacattacca
                                                                     1020
ccactattta cattaacatt cctaccatta gccgtctcca aaataaaaac acaaaattgc
                                                                     1080
tgccacatgt tcagcagttt tcacaataca gtgtgtctgg actttttaat gtaaacaaac
                                                                     1140
atgcttgatt taccaatttt cagagcaagg acacaaactt agcattcttc taggaatgga
                                                                     1200
aaacttgcca ggaagttact tcattctttt ttttttttc aaaagtgcat ctcgtagtgc
                                                                     1260
caactgtttt tctcggaagg aacgcttatt ttttgaccgg acattctggc tataccgcat
                                                                     1320
catcataaag ttcttctgtt ttttcttctc tttatttgtc gaactggaaa atggatttgt
                                                                     1380
tttggttttc ttcctcacaa attcttttcg gtctgtcttt ccagccattg cagttgctag
                                                                     1440
tettgtetet tigteagaet tiggetitti atgaaggegt teaatgieee gaagagaaag
                                                                     1500
taattcaccc ctgggctctt catcactgtc tatttcaatg tatttcctct tctgggattt
                                                                     1560
cccgggggca gcatcaagtt cttttctcat ttgggccatg cggattttct ggaagtcttc
                                                                     1620
ctgagttaaa actcggctag tgctgatggc tgcagctttg gccttccgct cctccatggg
                                                                     1680
catgctgttc agcttcttgg agatttcttg ctgttcttca tcggaagagt gttgcacatc
                                                                     1740
aatccattca ccatcagcat cctcctcctc actgagactg gtactttccc atccatcttc
                                                                     1800
atcattttca gcattctctt ctttctcaac ttccagaact tctgctcctg gaatgtaatc
                                                                     1860
tttagcatct aattctccat attcttgtac tcttgcttct atggaggcct ctgtaggctt
                                                                     1920
accccggaat ttcttctgca gcatctgagg attcagtgtt cggaagaggt gaatcaaagt
                                                                     1980
tctagcagac atcattacat tcttatcctt gtgtgtttta tactgagcca ggtcttggag
                                                                     2040
aagttettea gteatggeea gaggaeateg agetgttate teetttatag cattgattee
                                                                     2100
tactgtcatg acttctccag agttcttgtc ggtaacaaaa ttgtttgcca cagtcataag
                                                                     2160
caatgattga ataatctctg ggggtactag gtgatgagat gcttgtgcag caaacagaag
                                                                     2220
gatcttggtt acttctcttt ggtggggctg cagaaacctt tgcaaaaagg gatagaaatt
                                                                     2280
gaagaggaaa agctcatgaa ttcccaccaa tctggagata aggttcatga gcatcatctt
                                                                     2340
cacttcaaac ctctccttac agcactcaag ctgctttagt agtttttccg caaaatcttg
                                                                     2400
gggatcatga atcaagtgaa tggctgaaaa gttaaacacc tctqqttttt tcttcttcct
                                                                     2460
gtgtttcttg agcactttca ttgccttttc caactttttc ttgtttttgg aacttttctt
                                                                     2520
ccctgtagca tattgtacta gcaggtctct tgctgttggt ccatcatcct cagattcgga
                                                                     2580
qtcactgtcc tgtttttcat cttcatcttt cccaagaaag aatgtcaaag cggcaactaa
                                                                     2640
tatcttggtg accttagaga aacatgcagt tgtgataaca ttgacagttt ttgcatcatt
                                                                     2700
ccagatgttc cttctgtaga gttcaatcat tacatctaaa gacatcttgg ctqcqqttqc
                                                                     2760
attgctatct cttaacatgg tgtacatgaa attttgcaat actacattca ctttattgct
                                                                     2820
cttgtgtttt gcatttatat tcttgatatc agtcacaata tgtgtgtata aagtctttcg
                                                                     2880
cagaagttta tcatggcaac gaaaaagttc aaagaagagt tctagcaggc ttgatggatt
                                                                     2940
gatgagattc ttatttctca gcaagatcaa agctttgcaa aatgtcattc gcagatctgg
                                                                     3000
atccgatacg gtatgatt
                                                                     3018
```

```
<210> 5547
<211> 1428
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1427)...(998)
<223> similar to gi4186185 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5547
atttctgcta cagtcatgca ttctttaaca tcttgtttat tagcaaaaat cagcttttca
                                                                       60
ccaaggaaga aataccttta ttaggagtct aggcatgtca gaaaaaccca gttcagtcac
                                                                      120
agaaaaaggag gcaaatattg gtacagagca agaatccaag tqtqaaaata aaacctccat
                                                                      180
ctaaatatcc taacagaaat gctgctgaat ttagcccagg tgaaacttct gaaagctcct
                                                                      240
ggtgaaatga gatttttgca taaagagaga gctctccaqc actqctqcat ctgaqcttct
                                                                      300
tataaagtga cgggtcttgg ccagcagtag aggaagagat aaaggggatg tctcatcacc
                                                                      360
caagcaaggt cgtctgtgtt caagtgagag aagaacctta gggttttgga cagagtaaac
                                                                      420
tggggcagca gagggaaaat ggctgaggaa acacaacgtc tagggccgtg tgtggcataa
                                                                      480
tgtggagggg tctgtgcagt ctggtgtgag tgcatctcca ggaggtcttg ggaaacactg
                                                                      540
gcattccttc ctgaggccat tttggttctg ttctgacttc attcagagca gaactgccaa
                                                                      600
tgtccagcgc caagtcctgg atcataatta gctgagtgga atgcagtagc caccctatga
                                                                      660
ctcccatacc tcttcctttc tggagcagtc acttttctca gaccaagtga gatcttaccc
                                                                      720
agtaggggcc caatctagaa atcactccca ccttcatatg agcaccaggt ggagagaatc
                                                                      780
attctcatga ctcaaagctt tagatctcga tcctcagatg atgttccttg gacagaagat
                                                                      840
cagtctgaag ttatctgtgt caagagtagc tggcactgcc catgggtaat gggcccaagc
                                                                      900
gatgtgatgc cgcagctctc ccaaagaaga gctctctctg ctttcacagg caggagaga
                                                                      960
ggaaatgagg caggetteaa ggtagteaat gecaettaat tetteeateg aatttgegag
                                                                     1020
ctgctgagaa gagcatcaat cttctcctcc tctgctgatc ctttatctac cttactcctq
                                                                     1080
tatgctagca actgttgacg atccttcagg tcccggtagg tatcaatgac gacatcatgg
                                                                     1140
cacttgaact tagtggctaa gttcaacttc gtgtccacat cttccaccag attgacatac
                                                                     1200
tectgtaata tetgcaeagg ggeattgtte ttgtgeaaaa tttegaeaac eegatggaag
                                                                     1260
ccaatgggtg ctctcttctt ggtatagccc agccagttct ttgtggtgaa tagggcatct
                                                                     1320
acatcattcc aggctcgaag cttggcacga gcagccaggg ctgtcagcac atactgttta
                                                                     1380
tctgggatct taaatgtctt cttcaggttg acgggactgc tgaatgcc
                                                                     1428
    <210> 5548
     <211> 397
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (2)...(285)
    <223> similar to gi1408209 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5548
atgggcacat caaacattac aacgaatgtt gaaaagacaa aaagggggta taggaggcca
                                                                       60
actaccacct caatcaaaac tacatttagc cttatttact ttaaaatttt tgactcctgg
                                                                      120
tacggatggt aagactccag cagaaagaca ttggcaagtg ttagaggaaa agaggaaagt
                                                                      180
ttatctgaaa gtgttacgga aatccccaga agaaggacaa tggaaaggcc cggtggattt
                                                                      240
actgacatgg ggaagagggt atgcttgtgt gtttacagga gattgacaag ccatgtgggt
                                                                      300
gccctcaagg tgcttgcaac cctggaatgg gagactggag aaacatgggg tggccaacca
                                                                      360
tgggcccagt ccctccggta tgagccatga gtcagct
                                                                      397
```

```
<210> 5549
<211> 1255
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (9)...(331)
<223> similar to gi4240255 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5549
ggcaggcgac catccgggtg aagtgtctga ccgctcagca gcagtcaggc gagcgtctct
                                                                      60
cagetttegt gttgeggetg gaagtgetge tgeaqaaqge catqqaqaaq gaggeetgg
                                                                     120
ccagagcatc cgccgaccgc gtgcgcctga ggcagatgct caccagggcc caccttactg
                                                                     180
agcctctgga tgaagcactg aggaagctga gaatggccgg gaggtctcca agtttcttgg
                                                                     240
agatgctqqq gctcgttcgg gagtctgagg catgggaggc cagtctagcc aggagcgtga
                                                                     300
gagcccagac acaggaaggg gccggtgccc gggctggtgc ccaggctgtt gccagagcca
                                                                     360
gcactaaagt agaggcggtc ccaggaggtc ctggtcggga gccagagggc ctcctccagg
                                                                     420
caggaggeca ggaggetgag gageteetee aggaggget caageeegte etggaggaat
                                                                     480
gtgataacta ggttggggct ggggaggcag cccagcgcga qtcctccccq qqcaaatagg
                                                                     540
ctccgagggc cccggggcct cctctcctcc tctcaggcag cagggccctg gagacaggcg
                                                                     600
gaggcggggc cagggccggt ccctcacccc acatcgggat cggggccccc cacttccccc
                                                                     660
caaggggccc tgcccaccac caccttcccg gtgacccaga tgaccacatt taataccaaa
                                                                     720
tggggtgggg ggaggcgccc ctccagtgcc aggggcacgt gctgtgagct tcctgggagc
                                                                     780
ccaggttgtg ctcactgctc tcccgtatcg tgagcaccac ctctgctttc cctqcgtaga
                                                                     840
tctaggccag gggctgcttg tttttgtgga gccgtgtgtg ttcttctctg agcagctcct
                                                                     900
ccccagagga ccccagcgca gtcccgggag atggcggaaa gaaggcacca gggcacagtg
                                                                     960
gacactcatc ccgtgacagc gatggtgacc atgactgtgg gagaaagaac aggacccggg
                                                                    1020
atggagtggg gctgtctgag tttccccagt gaactttgtg ctttggcgtt ccaccctgt
                                                                    1080
tgttacttgt tactgagttt cctagacctg gggtgggtgt tcccccaqqa qqaqqqqt
                                                                    1140
cccgacctgt gtcctgtggt ggccatttgc agcttctgtg ttgtgattcc cttctcttca
                                                                    1200
acggtttcaa gtacatatct ctcaataaat ttcattcagt gttccaaaaa aaaaa
                                                                    1255
```

```
<210> 5550
<211> 2009
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (46)...(1614)

<223> similar to gil293680 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5550

```
cgggatcaat ttgatttgac agtcggtata actgatcctg agaagatggc gtcgggtggt
                                                                     60
ggtggctgta gcgcttcgga gagactgcct ccgcccttcc ccggcctgga gccggagtcc
                                                                    120
gagggggcgg ccgggggatc agaacccgag gctggggaca gcgacaccga gggggagac
                                                                    180
attttcaccg gcgccgcggt ggtcagtaaa catcagtctc caaagataac tacatccctt
                                                                    240
cttcccatca acaatggctc caaagaaaat gggatccatg aagaacaaga ccaagagcca
                                                                    300
caggatetet ttgcagatge cacagtggag ctateettgg acageacaea aaataateag
                                                                    360
aagaaggtgc tagccaaaac actcatttct cttcctcctc aggaagccac aaattcttcg
                                                                    420
480
acagtcggta taactgatcc tgagaagata ggggatggta tgaatgcata tgtagcctac
                                                                    540
aaagttacaa cacagacaag cttaccattg ttcagaagca aacagtttgc agtaaaaaga
                                                                    600
agatttagtg actttctggg tctttatgag aagctttccg agaagcactc tcagaatggc
                                                                    660
ttcattgtcc ctccgccccc ggagaagagc ctcataggga tgacaaaagt gaaagttggg
                                                                    720
aaggaagatt cttcttctgc agaatttctt gaaaaacgga gggccgcttt agaaaggtac
                                                                    780
cttcagagga ttgtaaatca tcctaccatg ttacaggacc ctgacgtcag agagttcttg
                                                                    840
gaaaaagaag agctgccacg tgccgtgggt acccagacat tgagtggtgc tggtctcctc
                                                                    900
aagatgttca acaaagccac agatgccgtc agcaaaatga ccatcaagat gaatgaatca
                                                                    960
gacatttggt ttgaggagaa gctccaggag gtagagtgtg aggagcagcg cttacggaaa
                                                                   1020
ctgcatgctg ttgtagaaac tctagtcaac cataggaaag agctagcgct gaacacagcc
                                                                   1080
cagtttgcaa agagtctagc catgcttggg agctctgagg acaacacggc attgtcacgg
                                                                   1140
gcactctccc agctggctga ggtggaagaa aaaattgagc agctccacca ggaacaqqcc
                                                                   1200
aacaatgact tcttcctcct tgctgagctc ctgagtgact acattcgcct cctggccata
                                                                   1260
gtccgcgctg ccttcgacca gcgcatgaag acatggcagc gctggcagga tgcccaagcc
                                                                   1320
acactgcaga agaagcggga ggccgaggct cggctgctgt gggccaacaa gcctgataag
                                                                   1380
ctgcagcagg ccaaggacga gatcctcgag tgggagtctc gggtgactca atatgaaagg
                                                                   1440
gacttcgaga ggatttcaac agtggtccga aaagaagtga tacggtttga gaaagagaaa
                                                                   1500
tccaaggact tcaagaacca cgtgatcaag taccttgaga cactccttta ctcacagcag
                                                                   1560
cagctggcaa agtactggga agccttcctt cctgaggcaa aggccatctc ctaatggacc
                                                                   1620
aaggacccca gagcccacct gtgtgacgct gcctttttat acactgtcct cctccacctt
                                                                   1680
gatggacccc tagtgatgca tcctgcctag gctggactta accccttcct ccctgtcccc
                                                                   1740
acgaccaact gtccccagtt actctaaccg ttatttcatt tagcttccat atatattttc
                                                                   1800
ttacctaaga gaatagtttc ctgctttaag caaaagacct acaataggtg gtggaattat
                                                                   1860
gggatggggt ggagtattga tataaatata taaatacaaa tgtatatttt tcaggatgtg
                                                                   1920
gtttaggaac tgggaataac gttttctgtt actcctgatg gtgccatgaa aaggttatgt
                                                                   1980
aataaaatat tttaaaatca aaaaaaaa
                                                                   2009
```

```
<210> 5551
<211> 812
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)...(599)
<223> similar to gi4680697 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5551
ctggaggagg aattagcttg aagcatggcg atgaaatcta cattgctcct tcaggagtgc 60
aaaaggaacg aattcagcct gaagacatgt ttgtttgtga tataaatgaa aaggacataa 120
gtggaccttc gccatcgaag aagctaaaaa aaagccagtg tactcctctt ttcatgaatg 180
```

```
cttacacaat gagaggagca ggtgcagtga ttcataccca ctctaaagct gctgtgatgg
                                                                      240
ccacccttct ctttccagga cgggagttta aaattacaca tcaagagatg ataaaaggaa
                                                                      300
taaagaaatg tacttccgga gggtattata gatatgatga tatgttagtg gtacccatta
                                                                      360
ttgagaatac acctgaggag aaagacctca aagatagaat ggctcatgca atgaatgaat
                                                                      420
acccagactc ctgtgcagta ctggtcagac gtcatggagt atatgtgtgg ggggaaacat
                                                                      480
gggagaaggc caaaaccatg tgtgagtgtt atgactattt atttgatatt qccqtatcaa
                                                                      540
tgaagaaagt aggacttgat ccttcacagc tcccagttgg agaaaatgga attgtctaag
                                                                      600
ccaaaagaaa gtctaattat atacagagat aaagctaaac gtaattatta tttaaatgaa
                                                                      660
agctattttt ttaaataaat tgaaattttt catgatgcta ctaatttqcc actaaatact
                                                                      720
gcaaatggtc accetgaate tettetgaca ttggatgtta tttgettata ttettataat
                                                                      780
tttaaatgag ggcacagtga aatgaaaatt tt
                                                                      812
```

```
<210> 5552
<211> 2403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2392)...(1576)
<223> similar to gi2114473 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5552 ttttttttt ttcaccgggc taggtctgct ttttattggc cacgcatcca gccgccagcc 60 tcagggcaca cacctggcag ggggcaggct cgggtaggct gccctcgctq ggtgggcagt 120 gagggggcag cggctgctgg gtgtcaccct gcagcccctc aggtggacct gtattqtccc 180 cagggcctgc ccacgctggg cagctggcac tgggaggggt tttctgttqa tgtgatqqcc 240 aagtttcagc tgcagggcag aggcctggca gtggcagcaa aggcagaccg cccccaactc 300 caacttcagg ggctggacat gctggaacgg gggccagacc ccatgggagg ggaccctggc 360 ctgccatggc actgcctgcc agcttacccc tgcccagggc ccccaactca gccacctcca 420 agcagtaaag acttgcaaag cattgcattt tgattaaacc ttgctgggct gaagggcagg 480 cagagetgtg gtggacactg gcaggacgca gcaccccccq actgqccctt gqcaggctgc 540 acceggegea tgegggtgtg ggecagggtt geetttagga ageaggtggg aggetggeae 600 gtgcaggcgg tccaggaggg caccaggcct ggcagggcac tggtgcctgt cgggttccca 660 gccacaacac cccaagaagg ctccaggagg gccccggctg ggtaaggcac qqaqttttqq 720 tttccggggc ccagtcccag cctggccccc agaagagcct ctcttggcag aatggcagca 780 tgtcctgtgg cctgggctct ctcacttggc cttgggcctg ggcctgaggc cttactggat 840 cacacacagt ttctttgttt tattatcatc agaatcaggg ggaacctctt cctqgctcct 900 ggagggacgc ttetteette getteeeggt eccetttgag geeeggeeee gggeeetqqq 960 gagtgtgccc gaccccgagg agtcggtcac cgcatcctcg gagaaggact tqtccaqqqa 1020 tgtgtccagt gcggactctg gggccgtgtc ctcctcgtcc tcgtcctcat ccccacctqq 1080 gcctgctgca gggggtctgg caccacggct gtggacagcg tcctccagcc cctcacttqt 1140 getgteggee teggeetgga ggaegeecag caaggaegtg ggateettgg catettgeet 1200 tgaacttccg gctgcagggg gctggttgct ggagaacttg aggggcttca gggcctgagc 1260 atctcccaga gtcaccggcc aggcccctc caagggctgg gggcactggg gatcctcagt 1320 ggttaggaca tcgctggcat ccacatacca ggaagaacgc ctctccaggg gccggggacc 1380 accetectee aactgeteea gggtgggetg agggeegggg gteacggegt etacaaggte 1440 ccaqccccgg gactcgctgg ctgttgtagc atcaaggccg ggctcagagg cgggacagcg 1500 cgtgctgccc acggggtctc ctgcagggtt actggtggcc acaggctctq tqqctcttqq 1560

```
gggatccatg gaggetgeet tgetgeecee gteggtgtee eegeggeece gggetgtett
                                                                     1620
ccgcagctgg aagcccttcc tgatgtcagc cagcagggca tcgatgacac acacctcctc
                                                                    1680
ctgcttcccg ggccccttcc tgacaggctt cccgtcctct ccccgaggcc gccgcgcctc
                                                                     1740
ctcctccgcc agctgctgct tcctcctctc tgccttcgcc gcctgctcct tccggtcctt
                                                                    1800
gttctccttc agggcgcgga ggaaaaggtc ccgqaaagcc ttcatggtgc tgaacgtgtc
                                                                    1860
ctccagggac agctgctggg cgtcctcaca caggtagtcg gccagctccc gttgcttctg
                                                                    1920
ctcgatgqcc tcaaacagct cgtccagtgc ccggaaggcc gagatgctgg cctggaggcg
                                                                    1980
ctcggtgtac tgctcctgga cctcggccac ggaggcagac accttccgct cggtctccag
                                                                    2040
aagcttcttc aggttggagc tggcctctga gcggatgatc tccaggttga tccctgctgc
                                                                    2100
ttgcgagggc tgttccaggt cccggggcag ctgcaggagg tcggggtggc tcttttccgc
                                                                    2160
ttcctccagc acgtggtgca gcagcgtcac gcggttctgc tgggacttgg tctccqtqag
                                                                    2220
cttcagcaat gtgctgatct tgaagccgtc ggcgtcaccg gtgtggctgc cgtagttgag
                                                                    2280
gaagttccca attctcagga tcagctggca gaagatgggc agctggcggc tggtgagcag
                                                                    2340
cctttcgcag gcagccagca ccagctgggc cttgggccgc accatgtcca gcacggcggc
                                                                    2400
cqc
                                                                    2403
```

```
<211> 949
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (946)...(898)
     <223> similar to gi3157938 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5553
gatcacagec cetacecacg tgeeteteca gtacategge eccaaceage eeeggaagee
                                                                       60
tgggctgcct ggccagcctg ctgtaagcta agaacccacc cacagcagcc ctcgggggtg
                                                                      120
tcactgcttc ctggaggttc aggagacccc ggacacctgg gacctgtgtt cctgagcccg
                                                                      180
tectgacate tgtgttette etgteagete caegeeeggg eeeetggace aeggggteea
                                                                      240
cctctcctct gtccggacca tttattgggg actttttgct cagcactgta ggaggaaaga
                                                                      300
aggaaggagg gatggaagcc tcttcctctg cttctcctgt ccctagaacc gtaaagccca
                                                                      360
gacgtcctgc ttcccactgg gaccctcaat gataacaggg tcagtgactg actctgaggc
                                                                      420
agcaaggaca gaggagaggt ggaccccgtg gtccaggggc ccgggcgtgg agctgacagg
                                                                      480
aagaacacag atgtcaggac gggctcagga acacaggtcc caggtgtccg gggtctcctg
                                                                      540
aactccagga agcagtgaca cccccgaggg ctgctgtggg tgggttctta gcttacagca
                                                                      600
ggctggccag gcagcccagg cttccggggc tggttggggc cgatgtactg gagaggcacg
                                                                      660
tgggtagggg ctgtgatccg atcagtgccg aggtaggact ggagggcagg gggcacgagc
                                                                      720
actgagccgt ccttctgctg gttactctcc aggagcgcga tgagaaggcg ggggacagca
                                                                      780
caggcggtgg cgttcaccgt gtgggcaaac tgcagctccc cagcctcggt ctggaacatg
                                                                      840
atgtggaggc ggcggctctg gaagtctgtg cagttggaag cactggtgac ctctccaaag
                                                                      900
cggcctcggc ctggcatcca ggcctcaatg tcaaacttgc gctcgtgcc
                                                                      949
```

<210> 5554

<210> 5553

```
<211> 720
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(175)
     <223> similar to gi5730484 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5554
gctgataata gaaagatgtc tcggaaggag aaagatgaaa gaatcttgtg gaagaagaat
                                                                       60
gaagttgctg attatgaagc tacaacattt tccatcttct ataacaacac tctqttcctq
                                                                      120
gtcgtggtca ttggtgcttc cttcttcata ttgaagaact tcaaccccac agtgtatcct
                                                                      180
tttcaaggtt gattatcttt tttagaagtc aagaaacagt agttcatttt ggttttgact
                                                                      240
tgtctggata ttttagtgga aagaaaact gctctgggag tcagtccatt aaatagtgct
                                                                      300
gactttagat aactttctgg acatttaaaa taacagctat tggtttaaga ttcttttaag
                                                                      360
tttatgaatt atgactgtat gataaagtat tacaaagtag tctatgggaa tctgtgtcct
                                                                      420
tgcctcctta aaaaaaagct ccaaagagcc aaagcaaacc tgtcattttt gatagcttct
                                                                      480
gaaataataa gcccctgtac ctgttatttt tgggctctgg gggttgggtg gatggccaat
                                                                      540
gcagttaaat aggttcattc cagtgtatct taatagtgtt tcaagctgct gttaagttga
                                                                      600
gcttttgggc aagaatcagt cttctcttat taatttatta aagatgttat ccaggaatgt
                                                                      660
gcagccaaga ttttaacaat tggtgattat gatgtaataa aatatcagaa accatccaaa
                                                                      720
     <210> 5555
     <211> 3163
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2759)
     <223> similar to gi5726289 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5555
atggggttat tcagaggttt tgttttcctc ttagttctgt gcctqctqca ccaqtcaaat
                                                                       60
actteettea ttaagetgaa taataatgge tttgaagata ttgteattgt tatagateet
                                                                      120
agtgtgccag aagatgaaaa aataattgaa caaatagagg atatggtgac tacagcttct
                                                                      180
acgtacctgt ttgaagccac agaaaaaaga ttttttttca aaaatgtatc tatattaatt
                                                                      240
cctgagaatt ggaaggaaaa tcctcagtac aaaaggccaa aacatgaaaa ccataaacat
                                                                      300
gctgatgtta tagttgcacc acctacactc ccaggtagag atgaaccata caccaagcag
                                                                      360
ttcacagaat gtggagagaa aggcgaatac attcacttca cccctgacct tctacttgga
                                                                      420
aaaaaacaaa atgaatatgg accaccaggc aaactgtttg tccatgagtg ggctcacctc
                                                                      480
cggtggggag tgtttgatga gtacaatgaa gatcagcctt tctaccgtgc taagtcaaaa
                                                                      540
aaaatcgaag caacaaggtg ttccgcaggt atctctggta gaaatagagt ttataagtgt
                                                                      600
caaggaggca gctgtcttag tagagcatgc agaattgatt ctacaacaaa actgtatgga
                                                                      660
```

```
aaagattgtc aattctttcc tgataaagta caaacagaaa aagcatccat aatgtttatg
                                                                    720
caaagtattg attctgttgt tgaattttgt aacgaaaaaa cccataatca agaagctcca
                                                                    780
agcctacaaa acataaagtg caattttaga agtacatggg aggtgattag caattctgag
                                                                    840
gattttaaaa acaccatacc catggtgaca ccacctcctc cacctgtctt ctcattgctg
                                                                    900
                                                                    960
aagatccgtc aaagaattgt gtgcttagtt cttgataagt ctqqaaqcat qqqqqqtaaq
gaccgcctaa atcgaatgaa tcaagcagca aaacatttcc tgctgcagac tgttgaaaat
                                                                   1020
ggatcctggg tggggatggt tcactttqat aqtactqcca ctattqtaaa taaqctaatc
                                                                   1080
caaataaaaa gcagtgatga aagaaacaca ctcatggcag gattacctac atatcctctg
                                                                   1140
ggaggaactt ccatctgctc tggaattaaa tatgcatttc aggtgattgg agagctacat
                                                                   1200
teceaacteg atggateega agtaetgetg etgaetgatg gggaggataa caetgeaagt
                                                                   1260
tcttgtattg atgaagtgaa acaaagtggg gccattgttc attttattgc tttgggaaga
                                                                   1320
gctgctgatg aagcagtaat agagatgagc aagataacag gaggaagtca tttttatgtt
                                                                   1380
tcagatgaag ctcagaacaa tggcctcatt gatgcttttg gggctcttac atcaggaaat
                                                                   1440
actgatetet eccagaagte eetteagete gaaagtaagg gattaacaet gaatagtaat
                                                                   1500
gcctggatga acgacactgt cataattgat agtacagtgg gaaaggacac gttctttctc
                                                                   1560
atcacatgga acagtctgcc tcccagtatt tctctctggg atcccagtgg aacaataatg
                                                                   1620
gaaaatttca cagtggatgc aacttccaaa atggcctatc tcagtattcc aqqaactqca
                                                                   1680
aaggtgggca cttgggcata caatcttcaa gccaaagcga acccagaaac attaactatt
                                                                   1740
acagtaactt ctcgagcagc aaattcttct gtgcctccaa tcacagtgaa tgctaaaatg
                                                                   1800
aataaggacg taaacagttt ccccagccca atgattgttt acgcagaaat tctacaagga
                                                                   1860
tatgtacctg ttcttggagc caatgtgact gctttcattg aatcacagaa tggacataca
                                                                   1920
gaagttttgg aacttttgga taatggtgca ggcgctgatt ctttcaagaa tgatggagtc
                                                                   1980
tactccaggt attttacagc atatacagaa aatggcagat atagcttaaa agttcgggct
                                                                   2040
catggaggag caaacactgc caggctaaaa ttacggcctc cactgaatag agccgcgtac
                                                                   2100
ataccagget gggtagtgaa eggggaaatt gaageaaace egecaagace tqaaattqat
                                                                   2160
gaggatactc agaccacctt ggaggatttc agccgaacag catccggagg tqcatttqtq
                                                                   2220
gtatcacaag tcccaagcct tcccttgcct gaccaatacc caccaagtca aatcacagac
                                                                   2280
cttgatgcca cagttcatga ggataagatt attcttacat ggacagcacc aggagataat
                                                                   2340
tttgatgttg gaaaagttca acgttatatc ataagaataa gtgcaagtat tcttgatcta
                                                                   2400
agagacagtt ttgatgatgc tcttcaagta aatactactg atctqtcacc aaaggaggcc
                                                                   2460
aactccaagg aaagctttgc atttaaacca gaaaatatct cagaagaaaa tgcaacccac
                                                                   2520
atatttattg ccattaaaag tatagataaa agcaatttga catcaaaagt atccaacatt
                                                                   2580
gcacaagtaa ctttgtttat ccctcaagca aatcctgatg acattgatcc tacacctact
                                                                   2640
cctactccta ctcctactcc tqataaaagt cataattctg gagttaatat ttctacqctg
                                                                   2700
gtattgtctg tgattgggtc tgttgtaatt gttaacttta ttttaagtac caccatttga
                                                                   2760
2820
atgtaagtaa aggatattto tqaatottaa aattoatooo atgtgtgato ataaactoat
                                                                   2880
aaaaataatt ttaagatgtc ggaaaaggat actttgatta aataaaaaca ctcatggata
                                                                   2940
tgtaaaaact gtcaagatta aaatttaata gtttcattta tttgttattt tatttgtaag
                                                                   3000
aaaataqtga tgaacaaaga tcctttttca tactgatacc tggttgtata ttatttgatg
                                                                   3060
caacaqtttt ctgaaatgat atttcaaatt gcatcaagaa attaaaatca tctatctgag
                                                                   3120
tagtcaaaat acaagtaaag gagagcaaat aaacaacatt tgg
                                                                   3163
```

```
<210> 5556
<211> 6772
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (188)...(4880)

<223> similar to gi3043584 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5556 cagctgccag gtcgagggat gtactcgaac ctataattct tcacagagta ttgggaaaca 60 catgaagaca gcacaccctg accaatatgc tgcatttaaa atgcagcgca aaagtaaaaa 120 aggtcagaaa gctaacaact taaatacacc aaataatgga aagtttgttt attttttgcc 180 atcaccggtg aacagctcaa atccattttt tacatcacag accaaagcca atgggaatcc 240 tgcttgttcg gcccagttgc agcatgtctc gccacccatt tttccagctc atttagcaag 300 tgtgtcaact ccattgttgt cctcaatgga aagtgtcata aatccaaata taacttctca 360 ggataaaaat gaacaaggtg gtatgttatg ttcccaaatg gaaaatttac ctagtactgc 420 cttgccagca caaatggaag atctaaccaa aacagttctg cctttgaata ttgacagagg 480 ctcagatcct ttcctttctt tacctgcaga aagtagttca atagatctct tcccttcacc 540 agcagatagt gggactaatt ctgttttttc ccaactggaa aataatacaa atcattattc 600 ctcacagatt gaaggaaaca ctaattcctc ctttctaaag gggggtaatg gtgaaaatgc 660 agtttttcct tcacaagtga atgttgcaaa taacttcagt agcaccaatg cccaacagtc 720 tgcacctgaa aaagttaaaa aagaccgtgg gcggggccaa actgggaagg aaagaaaacc 780 taagcacaac aaaagggcta aatggcctgc aattatcaga gatgggaaat ttatctgtag 840 caggtgttac agggctttta ctaatcccag atcactgggt gggcacttat ccaagcgatc 900 ttactgtaaa ccactggatg gagccgaaat tgctcaagaa cttctacaga gtaatggaca 960 gccttctctt cttgccagca tgattctctc cacaaatgca gtaaatttgc agcagccaca 1020 acaatctacc ttcaatccag aagcatgttt taaagatcca tcatttctac agcttcttgc 1080 tgaaaatcgc tcgccagcat ttttaccaaa tacatttcct cgatctggtg tgactaactt 1140 taataccagt gtcagtcaag aaggtagtga aattattata caggctttgg aaactgctgg 1200 cattcccagt acatttgagg gtgccgaaat gctttctcat gtttcaacag gttgtgtctc 1260 tgatgcatca caagtaaatg caacggtgat gccaaatcca actgtaccac ccctgttgca 1320 cactgtatgc catccaaaca ccttgctgac caaccagaat aggacgtcaa actccaaaac 1380 ttcctccatt gaggaatgta gcagcttgcc tgtttttcca acgaatgact tactactgaa 1440 gactgttgaa aatggtttgt gctctagttc atttcctaat tctggtgggc catcacaaaa 1500 ttttaccagt aacagttctc gtgtttctgt tataagtggt cctcagaaca caagatccag 1560 tcatttaaat aaaaagggaa acagtgcttc taagagaaga aagaaagttg ctcctccact 1620 aattgcacct aacgcttccc aaaacttggt aacaagtgac ttaacaacaa tgggactcat 1680 agcaaagagt gttgaaatcc caactactaa ccttcattca aatgtaattc caacttgtga 1740 acctcagagt ttggtggaaa atctaacaca gaaattaaat aatgttaaca atcagttatt 1800 tatgactgat gtaaaagaga atttcaaaac cagtcttgag tcccatacag tgttagcccc 1860 tttaacatta aaaactgaaa atggtgattc ccaaatgatg gctttgaatt catgcacaac 1920 ttcagtaaat tctgatttgc agatttctga agacaatgtt atacaaaact ttgaaaagac 1980 tettgaaatt attaaaaetg etatgaatte teaaataett gaggtaaaaa gtggatetea 2040 gggtgctggt gaaacttcac aaaatgctca aataaattat aacattcagc ttccttcagt 2100 aaacactgtg caaaataaca aattacccga ttcttctccg cttttcctcc tttataagtg 2160 tcatgccaac agagagtaac attcctcagt ctgaaggtat cacataagga ggatcagata 2220 caggagattt tagaaggctt acagaaatta aaattagaaa atgacctatc cactccagca 2280 teccaatgtg tactgataaa tacateagtg acaetgaete ecaegeetgt taaateaact 2340 gcagatatca cagttattca gccagtttct gaaatgataa acattcaatt taatgacaaa 2400 gttaataaac cctttgtgtg tcaaaaccaa ggctgtaact acagtgctat gacaaaggat 2460 gcactattta agcactatgg taaaattcat caatacactc cagaaatgat tcttgaaatt 2520 aagaagaatc aattgaaatt tgctcccttt aaatgtgtag tacctacatg tacaaaaaca 2580 tttacaagaa attctaacct ccgggcacac tgtcagttgg tgcatcattt tacaactgaa 2640 gaaatggtaa agttaaaaat taaaaggcct tatggaagaa aatctcagag tgaaaatgtg 2700 eeggeeteae gaagtacaca agtgaaaaaa cagetageta tgacagagga aaataaaaag 2760 gaatctcagc ctgctttaga attgagagca gagacccaaa atacccacag taatgtagca 2820 gtgatcccag aaaaacaact tatagaaaaa aaaagtcctg acaaaacaga aagttcttta 2880 caagtgatta cagttacttc agaacaatgt aatacaaatg cactcacaaa cacacaaacc 2940 aaaggacgga agattaggag gcataaaaaa gaaaaggagg agaaaaaacg aaagaagcca 3000 gtttcccaat cccttgagtt tccaacaaga tacagtcctt acagacctta tcgatgtgtt 3060 caccagggat gctttgctgc ctttacgata cagcaaaatt tgattctcca ttaccaggct 3120

gtacacaaat cagatctacc tgcattttca gcagaggtcg aagaggaaag tgaagctggt 3180 aaagaaagtg aagaaactga aactaaacaa actttgaaag aatttcgatg tcaggtaagt 3240 gactgttctc gaattttcca agcaattact ggcctaatac aacactacat gaaacttcat 3300 gaaatgactc ctgaagaaat tgaaagtatg actgcttcag tggatgttgg gaagtttcca 3360 tgtgaccagt tagagtgtaa atcttcattt actacatatt tgaactatgt tgttcatcta 3420 gaggcagacc acgggattgg actaagggca agtaaaacag aagaagatgg tgtatacaaa 3480 tgtgattgtg aaggctgtga ccgtatatat gcaacccggt cgaatctcct ccgacacatt 3540 tttaataagc ataatgacaa acataaggct catttgattc gtccaagaag attaacacca 3600 ggccaggaaa atatgtcaag caaggcaaac caagaaaaat caaagtctaa acatcggggg 3660 acgaagcaca gcagatgtgg aaaggaagga ataaaaatgc ccaagaccaa acgaaagaaa 3720 aaaaataatt tagaaaacaa gaatgcaaag attgtgcaga ttgaagaaaa taagccttat 3780 tctctgaaac gtgggaagca tgtatattct ataaaggcta gaaatgatgc cctgtctgag 3840 tgtacaagca gatttgtaac ccagtatcca tgtatgataa agggatgtac ttcagttgtt 3900 acaagtgaaa gcaatataat tagacattat aagtgccata aattatctaa ggcatttaca 3960 tcacaacacc gaaatcttct tattgtattc aaacggtgtt gcaactcaca agtaaaggaa 4020 acgtctgagc aagaaggtgc taagaatgat gtgaaagatt ctgacacgtg tgtatcagag 4080 agcaatgata attcaagaac aacagctaca gtttcacaaa aggaagttga aaaaaatgaa 4140 taagatgaaa tggatgaact aacagaattg tttattacaa aattaataaa tgaagatagc 4200 acaagtgtag agacccaagc taatacttct tcaaatgtaa gtaatgattt tcaggaagat 4260 aacctctgcc agtcagaaag acaaaaagca agtaatttga agagagttaa taaggaaaaa 4320 aatgtctcac aaaataaaaa aaggaaagtt gaaaaagctg aaccagcatc agcagctgag 4380 ttaagtagcg tgcgtaaaga agaagaaact gctgttgcca ttcaaaccat tgaggagcat 4440 cctgcatctt ttgactggag ctcttttaag ccaatgggat ttgaagtatc atttctgaag 4500 tttcttgagg agtctgcagt gaagcagaag aaaaatactg acaaagacca tccgaatact 4560 ggaaacaaaa aaggatccca ttcaaattca agaaaaaata ttgataagac tgctgtgact 4620 agtggaaatc atgtatgtcc ttgtaaagaa agcgaaacgt ttgtacagtt tgccaatcca 4680 tcacagcttc agtgcagtga taatgtaaaa attgttttag acaagaatct taaagattgc 4740 actgagettg tettaaagea aetteaggaa atgaaaeeta eegteagtet gaaaaaaett 4800 gaagtacatt caaatgatcc agatatgtct gttatgaaag atatcagtat aggtaaagcc 4860 acaggcagag gtcagtactg ataattaatg tagtataaat acatcattta ccatttatt 4920 ttaaatagga agccatcaag catgctagaa ttgtgaaact ttcattatat ttttttgttg 4980 ttgacatgaa ttaacctggc caaaaacaaa aaagaaaaaa aaaacatgac atttgtcatg 5040 taaaactttt ttttatccct atgggacttg aggaacagaa tcaqtacttc aqttattqta 5100 aatagtgagc taaacctcaa atttctatca cccagttgcc cttttcatga actaaacaat 5160 tatctgtgtg attggtatgt ttcaccaggt cactgctcat gtataacagt actctttatt 5220 tgtagatacc ttttttgtat atatttatta ttgtaaatca tgtgctgcca ccagcagtct 5280 gtaagtetaa aetattaaat gacacattta tatttggaat tttaattttt aactaagega 5340 tcaagttttt taaattgttc ttttattgtt ttaaattaag aactttttga actaaaacca 5400 gaaactctgc catagttcat tgatttttac atgaaacatt tatttacaag atgatatcaa 5460 gattactttt cacaaaatag gcacattata tcaacacttt gctctgcttt gtaaatttgc 5520 catccaggat tttggggtgg tattcatgtg aaattaaagc agattctcta gcagtttcct 5580 atagctacag tttttttttt tcattgcttc taattggata tagttactat gagtccatga 5640 aatacaatgg aaatgtgaat aaagaattta ctacattgaa gattttaaac atttggtatt 5700 aaaaaaaaat cctttgtgaa tgtgatagaa aactagtagt gtggagcagt gtaaatattt 5760 gaggtggtga tttgtgaagt agcccagtat tgccttaaat aaaatcacat ttcatttctt 5820 5880 tttatagatt ggtgtatagc tttaaactgt ataaagtttt gtggaaagat tttttaaac 5940 atttttataa atcttaaaat tgatatcatc aaagtgagcc catcttgtgt ttataaaata 6000 caagagteet taacatttat aattacatag ataaaacaet ttetataagg aagttggatg 6060 ttttgatttt actgtttata gatgttagat tgtacagatt tgtctgtatt tctcaccata 6120 tctaatgata ctttttcat tagattggtc ttcaagaaca gtattagtta taattatttt 6180 ggttattcag tatatagtta gctcttacag tttagcttta ttcaccatat ttatactgtg 6240 gattcacagc gagaggtaga ggttattcca ggagagttga tgaccttcat ttaaagtcca 6300 actaaaatca gtagtagaaa cataagaaaa catctttgca atatttactt ttgtttctgt 6360 ttgccgtaaa tagtaacatt gtttttttt attttgtgtt tgttataaaa cagttgcatt 6420 cacaatatta ttggcctgag atattgatga tattgtgatg gtatgaaaat gtgtacattc 6480 cctgtgcaac atcagatttg caggaaaaat gaagcactta ctgaaatcgc tggtactctg 6540

```
aataaataag catggtcaag gagtgaacta ttttcttttg gaaatttctt tttaattttt 6600 attattaaag tattttattt ttagggcctt ttgggtttta ttgaatagtt catttcacct 6660 gtttaagact tactaccaat aagcataaaa cctgacacgt taaaatccct gccctttggt 6720 gagcccactg ttatttatta aaataaaagt tattttatgg gtgattaaaa aa 6772
```

```
<210> 5557
<211> 2112
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (610)...(1245)
<223> similar to gi180189 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5557 tgaagatcca catcttccgg ataaaatcca ggtcttttct ccaatatatg tcttcctgaa 60 gatccacgtc ggccagaaaa tccatgtctt ccagaaaatc catgtcttcc agtaacctcc 120 cagtetteca gaaaateeac gtetteecaa caateeaagt etteeggata atttgggtet 180 tectgaaaat etaegtette caaaaaagee atgtetteea gaaaateeae atetteeaat 240 ggcctccagg tcttccagac tatccatgtc ttccagaaaa tccttggctt cccttaaatc 300 tatagettee aaaaaateeg ggtetteeag gaaateegtg tetteeagea agteeaegte 360 ttccaacaaa gccatgtctt ccagactatc catgtcttcc agaaaatcct tgtcttccct 420 caaatccatg tcttccagaa aatccacgtc ttccagaaaa tatatgtctt ccaactaagc 480 tacgtcttcc aacaaatcca tgtcttccta tatctccagg tcttccagca tctccagggc 540 ttccagcatc tgctcgtctt ccaacatctc cacgtcttcc agcatctctg tgtcttccag 600 catcttcatg tcttccaaca actacccagt cttccatcaa ctggctcaat atccatgtct 660 tccaacgtct ccagtgtct gatcttctga cattcaggtc ttccagtgtc tgcaatatcc 720 agggtttccg atggcacctg tgtcaaggtc ttccaacaac tccgggtctt ccagcgactt 780 caagtettee aataatetea aggtetteea gataateetg agetteeaga aaateeacat 840 cttccagaca atccatgtct tccggacaat ccatgtcttc caagaagctc caagtcttcc 900 agtaaatcaa gtcttccagc aaatccagtc ttccagcaat tactggtctt ccaccaaatc 960 cagatettee aggaaaatee aegtetteea ggaaateeat gtetteeaat aattteaagg 1020 tettecatea aatacagate ttecagetaa tecatgtett eeagaaaaat etgtgtette 1080 caccaaatcc aagtcttcca gtaaatctag ttcttccaga aaaatctaga tcttccagtc 1140 aatcagtgtc ttccagaaag aaatccaggt cttccagtca atcagtgtct tccagaaaga 1200 aatccaggtc ttccagtcag tcagtgtctt ccagaaaaat ctacgtcttc caccaaatcc 1260 aggtetteca gteaatecae atetteeggg aaaaaateea ggtetteeag eeaatatagg 1320 tetteetgaa gateeaegte tteeagaaaa teeatgtett eeagaaaate eatgtettee 1380 agtaacctcc cagtetteca gaaaatecae gtetteecaa caatecaagt etteeggata 1440 atttgggtct tcctgaaaat ctacgtcttc caaaaaagcc atgtcttcca gaaaatccac 1500 atcttccaaa tggcctccag ggtcttccag actatccatg gtcttccaga aaatccttgg 1560 tcttcccctt aaatcctata gggttccaaa aaatccgggg tcttccaggg aaatccggtg 1620 gtcttccage aagtccacgt cttccaacaa agccatgtct tccagactat ccatgtcttc 1680 cagaaaatcc ttgtcttccc tcaaatccat agcttccgaa aaatccaggc tttccaggaa 1740 atccgtgtct tccagcaaat ccacgtcttc caacaaagcc atgtcttcca tcaaattaat 1800 gtcttccagc ctacttgtgt cttccaacaa aggtcttcca gcatctccag ggcttccagc 1860 atctgctcgt cttccaacat ctccacgtct tccagcatct ctgtgtcttc cagcatcttc 1920 atgtcttcca acaactaccc agtcttccat caactggctc aatatccatg tcttccaacg 1980

```
tctccagtgg gctgatcttc tgacattcag gccttccagt gtctgcaata tccaaggttt 2040 ccgatggcac ctgtgtcaag gtcttccaac aactccgggt cttccagcga cttcaagtct 2100 tccaataatc tc 2112
```

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<210> 5558
<211> 1810
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1774)...(114)
<223> similar to gi1006659 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5558 ttttttttt ttaaggaaag gaactttaat gagaaatcaa aacacaggga accaaagtgc 60 aaatcatcca ccccccatgg gggggccatc ctgaacccca catcatcccc tcaqccccct 120 tcaggccccc agcgcaggcc cagggcctgg agcttctgcc tcaggtagct cttgagctgg 180 ggcaggcctc tctgggactc cagttcctcg aagggtagcg gcaggagctg gtagcccatc 240 aggeetaggt geegeteest cagggeeste gageecagte aggeaceegg geegteeegg 300 cagtaaatgc ccagccgttc ccgcaacacc agcaccaccc tctgggcaag ggtctcgagt 360 agtggcgcta gaggcagcct gggccctgtg ggcaggaccc ttggtgggta tggcaggaag 420 gggtcctggg tcctcacggg aagcacagca ccagagctgc tggcgcacag caggaagtct 480 gtgcagtagc ctggaggcac agtcaggtcc tggcggtatt tctcctcccc cagcagctgg 540 cgcaacccct cagctactat gtccttgtga ctgtacttgc agcgggcacg gtcggtgatg 600 agaggctggg gaaagatggg cacttgctgc cttcggggaa ggcggggacc ccggtatcct 660 gggagctcca gctccacggc cgtgtccagc agggagaggt agcgacgcac aatcagagca 720 tgaggggtgc cactgatgta gttgatgaag ccaggggaaa aaacaaagtg cagggctctg 780 aagggcaggc accgcagttg gcacagtgac atcaagatgt tgactgtagc caggggtgcc 840 accectgett ecegageeag gateetetea aggeagggea taaactgetg ttecagggge 900 aggtagttca gtcgcccaaa gggcaggacc aacttctqta ccaccttqct qctgagttqc 960 gtttcctgaa ccaccaggaa gtgggcaatg gcttccagaa gctggggctc ccgcaaccgg 1020 tgccgggcca ggtgctgggc caggagcacc atcacgtggg gagtcagttc ctctgqcctt 1080 gcctctgcca ggctgctgat cagatgctgc cgtggatacc gcagaaaacg ggggcagctt 1140 agagcagett ccaaccettg cecacetegg agaagggget gcaaaggggg aggtggette 1200 ggagggaggc ggagccttcg ctcctgttcc agggcacaca ccaggggacc atcagatgga 1260 aagccaagta agactgcaag gtgcagacac acgtggatgg tgtgaatgtc aaaggagggg 1320 cagtttcgga tgatgagctg actcaagtcc tgcagtgtga cctgctccac aggaggggc 1380 cgtggccgag accccaagag ctggcccaga cgacgaagcg ccaccgagta gtggtgggcg 1440 cgcaccttgc tggggttctg gcccagccag cgcagcagct ccccagggct cttcgcctgt 1500 tecagaagee getgeagtee ttgeacagga cetgeactgg ggeeteetee aacaggeegg 1560 tcccccatt tgctgggccc caaacagcag ggctgtactg gagggatcag cagcaggcca 1620 gacagccgag caggggaggt ctgagcagag agcaggactc gaagcatgga gttgggtgat 1680 ggagaccatg actococggg coctgegcag gtcgctccct cagteggtct cggggcccgg 1740 gggccgggtt cccccgcgg cctcctcatc ggctaqccac cqaqtccqcc atcttcccc 1800 cacgcgtccg 1810

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<210> 5559
     <211> 1193
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (751)...(1100)
     <223> similar to gil619936 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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tatttgactt tctgtttgtg agttaatttg ttctgggacc aaactgaggt tcgggctgct
                                                                      120
atttctcacg gcccaataac gagatgcaga tgaactgggg aggaagagag ttatttctgt
                                                                      180
aactggttac agggagaagg tctgaacatc atcaccagac caactccaaa ttacaaagtt
                                                                      240
ttccagagct tatatacctt ctaagctata tgtctacctg taagtgtgca ttcacctaaa
                                                                      300
gacataagtt actaacttct tttaatctat aactaaggtc tgagtcctga agaccttcct
                                                                      360
ttggagcctc agtaaattta cttaatctaa atgggtccag gtgctggagt gattaccctt
                                                                      420
atcttgtctt ctgctaaatc actgaagttt gaggagttcc tttagacctt caataaactt
                                                                      480
gtttgtagag gcctggagag tttcttcaca acccacagta aaacttgttt aatcctgaat
                                                                      540
gggtcctgtt aagaattcct tcattattct gtcatgcttt aaggcccagg gaaagcctag
                                                                      600
qcaaaactct tgataggctt ttgttacatt ccagcctttg tgaaagggca ctggcttttt
                                                                      660
tagcttttaa tatttaactt aaccactcag tcagtactga aacagtcgtt atggaggcct
                                                                      720
gcattagtga gacctggcct gccacaatcc tgtgttcatg tattgaaaga ctgtattatt
                                                                      780
aagatggcag tactacccaa agcagtctac agattcactg agagccctat caaaattcca
                                                                      840
acagcctttt tgaaaaatgg aaaagcttac catcaaactc atatggaatt gtaaacgccg
                                                                      900
tgaatagcca aaacaatgcg gaaaaggcca aagttggagg actgacactt cccaatttca
                                                                      960
aaacttacta taaaactaca gtggtctaaa cagtgggctg ttggcacaag tacagatgat
                                                                     1020
actaacatac agatcaatag aatagaattg aggcttcaga aataaaccca tacatctatg
                                                                     1080
gccaactgac tttcaacaaa tgatgctgca ataactgaat gtacacatgc aaaaaaaaag
                                                                     1140
ttgaacctct atgtgatatt gcgatagaaa aaaaacatat ttttgggctt tgg
                                                                     1193
     <210> 5560
     <211> 1260
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1254)...(1082)
     <223> similar to gi299471 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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<400> 5560

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                                                                    60
geoctyteca tytectygae etgaetetyg ceetygaeet ecetytecet geoctyceat
                                                                   120
180
qccctgccct ggccttctgc tgaccctgat cctgccatgg ccctggccct gccatgtccc
                                                                   240
tgccctggcc ctggttctgc cctgcttctg gccctgqcct tqqtcctctc atqtccctgq
                                                                   300
etgtgaccet geceetggtt tttetetgge catgaccetg ecceggttet gteetatece
                                                                   360
tggccctgtc tcagttctgt cctagccctg gcctttcaca gtactttatg cttagtaagg
                                                                   420
gctccatggt gtctgtgagt tgaatgttgt attcatagta tctgccaaaa cagaaagaaa
                                                                   480
aaaaacaaaa tattttgata agaagttaaa gctttgtata taatatgcct tgaattgtaa
                                                                   540
gtgcctgtta ttagttgtat tacatatagg tcatggtttt gtacacataa ctccaaacca
                                                                   600
ttgatactgt taaaagaata tatgaatata tgaaagaatg tataaacgta agaatgtatc
                                                                   660
agtatctaat gacctttcca aattaatttt tatttttagc tctgttagat ttttctcagt
                                                                   720
gtaacaaatg tttattccta tgtaattaag ggcgtatttc ctgtacagaa tattcatatt
                                                                   780
acctaattga aaattatatg atacaaaaat ataatactat ttttagccag gcatggtggc
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tcatacctgt aatcccaaca ttttgagagg ccacgtttgg agaatcattt gagtccagga
                                                                   900
gttgaccagc ctgggcaaca tagtgagacc ttgtccttat taaataaata aataaataaa
                                                                   960
taggttgggc actgtggctc atatctgtca tcccagcatt ttgggttgcc caatgcagga
                                                                  1020
ggattgettg agececagga gtttgagace agectgggea gaatageaag actecatete
                                                                  1080
tacaaataat aaaatattaa ccaggtgtgg tggtgtgcac ctggggtacc agccacctgg
                                                                  1140
gaggctaagg tgggaggttt gctcgaggct gcagtgaact gtgaatgcac cactgcattc
                                                                  1200
cagcctaggc catagaacag gatcttgtct ataaataaag aaataagtaa aaatataaat
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```

```
<210> 5561
<211> 8514
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (453)...(6673)
<223> similar to gi6002696 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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tgctggtggt tgtgaagtca aagcgagtca cttcttggtg gccgtactgc tggatgctga
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aaggttggca atgccactcc ccaatgccac ggccatagca gtagcactgg tatctgacac
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```

```
<210> 5563
<211> 4827
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (496)...(3592)
<223> similar to gi4582149 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5563 cagaaggcta atacttatat atttttggag gctaagactt gaattgcaac ttagcccaaa 60 gaaatcactg taagtagtta gggttatcct gaagggaata tgttttattt attttttga 120 agtctgaaat atcttggcct tgaatagcat gaaattccct tattatctgg aataaaaaa 180 aaccctaagc tataagtagt gaaagtctta ggaaaatatt tttgaagcat ttaaaaaaaa 240 attctgaata tgttgtgtaa gaagaacatt gtaattgaat atctggcaga cattctatat 300 gagtatettt atgggttttg tttttcagge attaaaaaat atttaateat teatgtgttg 360 agactcattc ttgagttatg gatgacaagg cttctgttgg aaaaatcagt gtctcttcag 420 actcagtatc tactcttaat agtgaagatt ttgtcttggt ttccaggcaa ggagatgaga 480 caccatctac aaataatgga agtgatgatg agaaaacagg actcaagatt gtagggaatg 540 gaagtgaaca gcagctgcaa aaagagctag cagatgtact gatggatcct ccaatggacg 600 accagccagg ggaaaaggag cttgtgaaaa ggtcacaact ggatggtgaa ggagatgggc 660 ctctttctaa tcagctctcc gcttcatcca ccattaaccc tgtgccatta gtagggctcc 720 aaaaaccaga gatgagccta ccagtgaaac ctggacaagg agattctgaa gcttcaagtc 780 ctttcacacc agtggccgat gaggacagcg tagttttcag taaactgact tacttaggct 840 gtgcctcggt aaatgctccc aggagtgaag tggaagcctt aaggatgatg tccatcttaa 900 gaagccagtg tcagatttca ctagatgtta ccctttcagt gccgaatgtg tctgaaggaa 960 ttgtgagact cttagatcct cagacaaaca ctgaaatagc aaactaccct atctacaaaa 1020 tectettetg tgteagaggg catgatggaa etectgagag tgaetgtttt gettteaetg 1080 aaagtcatta caatgcagag ctcttcagaa tacacgtctt ccggtgtgaa atacaagaag 1140 ctgtaagccg gatactttac agttttgcca ctgccttccg ccgttctgcc aagcagaccc 1200 cactttcagc cactgctgca ccccagactc ctgacagtga catctttacc ttctctgtgt 1260 ctttagaaat aaaagaagat gatggtaaag gttattttag tgcagttccc aaagataagg 1320 acagacagtg ctttaaacta cgccaaggaa ttgataagaa gattgtcatc tatgtgcagc 1380 aaacaactaa taaagaactt gccattgaaa ggtgttttgg tcttctcctt agtccaggaa 1440 aagatgtacg aaatagtgac atgcacttat tagatttgga atctatgggc aaaagttcag 1500 atggaaagtc gtatgttatt acggggagct ggaatccaaa atccccacat tttcaagttg 1560 taaatgaaga aactcctaaa gataaagtcc tgtttatgac cacagctgta gatttggtaa 1620 taacagaagt acaggageet gttegattte teetggagae aaaagteege gtttgeteae 1680 ctaatgaaag attattctgg cccttcagca aacgtagtac tactgaaaat ttctttttga 1740 aactaaaaca gataaagcaa agggagagaa agaataatac tgacacttta tatgaagttg 1800 tatgcttgga aagtgaatca gaaagagaga ggaggaaaac tacagccagt ccttcagttc 1860 geetgeeaca gtetggateg caaagtteag tgatacette teeteeagaa gatgatgaag 1920 aggaagataa tgatgaacct ctcctgagtg gatctggtga tgtatccaaa gaatgtgcag 1980 aaaaaattet tgaaacatgg ggagaactgt tgtcaaaatg gcatetcaae ttgaatgtga 2040 gaccgaagca gttgtcatcc ttagtaagaa acggtgttcc tgaagctctt cgaggagaag 2100 tctggcagct gctagcaggc tgtcataaca atgaccacct ggtagagaaa taccgcattc 2160 ttatcacaaa ggagtctccc caggacagtg ctatcacccg ggatattaac cgaacattcc 2220 cagcccatga ctactttaag gacacaggag gagatggaca agattcctta tataaaatat 2280 gcaaggetta ttetgtgtat gatgaagaga ttggttattg ceagggeeag teatttettg 2340 ctgctgtgct ccttctccat atgcctgaag aacaggcatt cagtgttctg gtcaagatca 2400 tgtttgacta tgggctcagg gaacttttca agcaaaactt cgaagatttg cattgcaaat 2460

```
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                                                                   2580
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                                                                   2940
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                                                                   3180
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                                                                   3360
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                                                                   3720
gttggtaggt cactggacca gagcttgtga agcaggcaac ctctggggta agactactga
                                                                   3780
tactaacagg cctgctagct cagccgacgc tctggacact ctagaaatca ctcctcagtg
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gcctgggtac aaacctcact gttcagatgg gctgtaagtt ctcacttcaa agctatggaa
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```

```
<210> 5564

<211> 2338

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(2339)

<223> n = a,t,c or g

<220>

<221> misc feature
```

<222> (627)...(2012) <223> similar to gi4151084 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

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                                                                      120
egegeeegge ategataate tgaateteta aegageteee gggegaegtt gatgeagetg
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gtaccgggac cactettega aaateategg tttagaggtt ttaattetga atecattgeg
                                                                      240
aaaactgttg ggcggacaga gcactactaa ctcctaactt ttctcaqaaa gctgggctct
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gctttcgcca gcaacccggt ccgaagtcgc gggcatattc tgtctgaaat cgtgtgcacc
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gaaatccccg ccttgcggtg gaggctggcg ctaggcggcc tcagcctcgg cctgctgcgc
                                                                      420
tcaggaaccc gcgccccggc tcctcggcga tccattgctc tttcctctqq cqccqqccqc
                                                                      480
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                                                                     2338
```

<sup>&</sup>lt;210> 5565

<sup>&</sup>lt;211> 8734

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (91)...(6623)
<223> similar to gi4530437 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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cggacgcgtg gggagcatgg acggtgccat ggggcctcgg gggctgctgt tgtgcatgta 60
cctggtatct ctcctcatcc tgcaggccat gcctgcctg ggctcggcta caggcaggtc 120
```

```
caagagcagc gagaagcgac aggctgtgga caccgctgtc gatggcgtgt tcatccqqaq
                                                                      180
tttgaaagtc aactgcaaag tcacctctcg cttcgcccac tatgttgtca ccagccaagt
                                                                      240
ggtcaacact gccaatgaag ccagggaagt ggccttcgac ctggaaatcc ccaagacagc
                                                                      300
attcatcagt gactttgccg ttacagcaga tggaaacgca tttatcggag acataaagga
                                                                      360
caaggtgact gcatggaagc agtaccggaa agcagctatc tcaggagaga atgccggcct
                                                                      420
tgtcagggcc tcggggagaa ctatggagca attcaccatc cacctcaccg tcaatcccca
                                                                      480
gagcaaggtc acgtttcagc tgacttatga ggaagtgctg aagagaaacc atatgcagta
                                                                      540
tgaaattgtc atcaaagtca agcccaagca gctggtgcat cattttgaga ttgatgtgga
                                                                      600
catcttcgag ccccagggga tcagcaagct ggatgcccag gcctctttcc tgccgaagga
                                                                      660
actggcagcc caaactatca agaagtcctt ctcaggaaaa aagggtcatg tgctgttccg
                                                                      720
teccaeegtg agecageage agteetgeee cacatgetet acateettae tgaaegggea
                                                                      780
cttcaaggtg acctacgatg tcagtcgaga caagatctgc gacctcctgg tggccaataa
                                                                      840
ccactttgcc cacttctttg ccccccaaaa cctgacaaac atgaacaaga acgtggtttt
                                                                      900
tgtgattgac atcagtggct ccatgagagg ccagaaagtg aagcagacca aggaggcact
                                                                      960
ccttaaaatt ctgggggaca tgcagccagg ggactacttt gacctggttc tttttgggac
                                                                     1020
tegagtacaa tegtggaagg getegetggt geaageatet gaggeeaace tacaageage
                                                                     1080
tcaagacttt gtgcggggct tttccctgga tgaggccaca aacctgaatg gaggtttgct
                                                                     1140
ccggggaatt gagatcttga accaagttca ggaaagcctc ccagaactca gcaaccatgc
                                                                     1200
ctcaatactc atcatgttga cagatggcga tcccacagag ggggtgacgg accqttccca
                                                                     1260
aatcctcaag aacgtccgca acgccatccg gggcaggttc ccgctctaca acctgggttt
                                                                     1320
eggecacaat gtggaettta aetttetgga ggteatgtee atggagaaca aeggaeggge
                                                                     1380
ccagagaatc tacgaggacc atgatgccac ccagcagctg cagggtttct acagccaggt
                                                                     1440
agccaaaccc ctgctggtgg atgtggattt gcagtacccc caggatgctg tcttggccct
                                                                     1500
gacccagaac caccataaac agtactacga aggctcagag attgtggtgg ccqqqcqcat
                                                                     1560
tgctgacaac aaacagagca gcttcaaggc tgatgtgcag gcccatgggg agggacaaga
                                                                     1620
attcagtata acctgcctag tggatgagga ggagatgaag aaactgctcc gagagcgtgg
                                                                     1680
ccacatgctg gagaaccacg tcgagcgcct ctgggcctac ctcaccatcc aggagctgct
                                                                     1740
ggccaagcgg atgaaggtgg acagggaggt gagggccaac ctgtcatccc aggccctgcg
                                                                     1800
gatgtcgctg gactatgggt ttgtgacccc actgacctcc atgagcatca ggggcatggc
                                                                     1860
ggaccaggac ggcctgaagc ccaccatcga caagccctca gaggattctc cgcctttgga
                                                                     1920
gatgctggga cccagaagga cgttcgtgct gtcagccttg cagccttctc ctactcattc
                                                                     1980
cagctccaat acccagcggc tgccagaccg agtgaccggc gtggacacag accctcactt
                                                                     2040
catcatccac gtgccccaga aagaggacac cctgtgcttc aacatcaatg aggagcctgg
                                                                     2100
tgttatcctg agcctggtac aggaccccaa cacaggcttc tcagtgaatg gacagctcat
                                                                     2160
tggcaacaag gccaggagcc ctgggcagca tgacggcacg tacttcgggc ggctgggaat
                                                                     2220
cgcaaaccct gccacggact ttcagttgga agtgactcct cagaacatta cgctgaaccc
                                                                     2280
cggctttggt gggcctgtgt tttcctggag ggaccaagct gtgctgcggc aggacggggt
                                                                     2340
ggtggtgacc atcaacaaga agaggaacct ggtggtgtct gtggacgacq qtggcacctt
                                                                     2400
ttgaggttgt ttttgcaccg agtgtgggaa ggggagctcg ggtcnaccag gacttcctgg
                                                                     2460
ggcttctaat gtgctgggac aagtcaatcg ggatgtcaag cccgggacgc aagggctgct
                                                                     2520
gggggcaaat ttttccaacc ccaacgggtt ttgaaatgtc tgaaaatcca cccccaggct
                                                                     2580
ccgaccccca aaaagcccaa atgcccacga tggtggtgag gaacccqccc qqcctcacgg
                                                                     2640
tcacccaggg gtttgcaaaa agactacagc aaggacccgt ggcatggggc cgaggtgtcc
                                                                     2700
tgctggttca tttcacaaca atggggcttg aattcaccga ttgtgcctac actgattata
                                                                     2760
ttcgtccccg acatcttctg agccctctgg gccagcaacg cctgttccnt gcccccgggg
                                                                     2820
gccaaggcag aggaggagga cgacateetg acetgetget gaggetgtae eteettgace
                                                                     2880
taagctggtt cctttgtgtc aaagcacctc atgccttccc attaaagaga ggccgtgtcc
                                                                     2940
aaaaaaaaa
                                                                     2950
```

<sup>&</sup>lt;210> 5568

<sup>&</sup>lt;211> 1673

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1582)...(144)
<223> similar to gi5777952 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5568
ttttttttt ttgagcggtt ttcttaagtg tctttaatac tccactcagg gcagtcccct
                                                                       60
ccctctactg agaggetett ggetetggee ccaagageag etggaaggee etggeetgaa
                                                                      120
cttcaaccaa cttgaatgtc caaggctgtg tgtgccacgc tccctggctc tggtacgtgg
                                                                      180
tatgcaagca cctctcgggc cttgggggag tttgatcccc tccagccact cctgggtaca
                                                                      240
gcctcctgca cgtgtgcacc tggactccgg acgccgcaca gggatgtcta agtgtaaatg
                                                                      300
ccttccattc tgcccgcagc aggggcctta tccgcatgtc cgtctgggag tctggggctt
                                                                      360
ggcctcttgc cattttaagc atcctccaag cacaagggga ggacccttcc acaaagtggg
                                                                      420
aatgggggaa ctttgccctt ctttaaaggt ttcaaggatc aagtttctgg gatgtttcga
                                                                      480
aaggcatagg gttccaagac aaaggtttac acccatcttt tcggttcttc ttcaagggtg
                                                                      540
accttctgtg gaaatctttg gtttctaagg gttcggtaag gtgactcctc cacatccctc
                                                                      600
cgttgaacag ctccttgggc cgcatgtctg aagatgtgtg ccaggtgccc gtctgagctg
                                                                      660
gctccatcat gacgcgtcac tttgtcctcc ttcaagtctc caaacagagt gtcgacgqca
                                                                      720
gcatctctca ctgagaggtc accttgctcc cattaatttg aagcaaattt cacctgatgt
                                                                      780
taaacacgca agtcaagcgc ccccgggaag ccatgcaaag ccagggggaa gggctttccc
                                                                      840
tgaagagcct cccagcttct tgtcattaac caaggggcca ccaatgaccg tggaaaaatc
                                                                      900
ttctctggag acaaggttct gctgtctggc cgaaataatc cttcaccaaa gaacccatga
                                                                      960
cctgctgggg ggactttggc ggtgccaaga aggtgggcca gtgatggggc gaccccagca
                                                                     1020
acccgctccg gcgtatcgga ccccagccca ggacaggcag aggtcagcat ggggcagggt
                                                                     1080
gcgttccctc cctcactgtg ctggcgaata acgacgcacg aattcttttt gactctccca
                                                                     1140
ggatactaaa atccgcagct atcgtcgtat caaatacata gtgcaccccc aagacttttg
                                                                     1200
aggaaaccac agagtettet ggatgeaate agttacaetg aggttgaaat ttagecagea
                                                                     1260
aaaataaggc aaagattgag gacacacaga cactaaccag cactttgtgc tttgaggtat
                                                                     1320
cacatttctt gttaaggttc agaacgcgga agaagtcctt ggcattttgc tgggaaagtt
                                                                     1380
ggactcette etetgeagte atacagetgt cacatgeeag geagtegete aaaaatatet
                                                                     1440
tggcatcagc caacttgtgg aattctccct tctctccatt ttcctgggct ggactcggtg
                                                                     1500
catcggctga cacattctct tggtcatcag tttttgtttt cttactacat tccttgcgcg
                                                                     1560
tgcagtgctc acacttcatc tggagcgcgg cgggcgggag gccgggcgcc tcagactcag
                                                                    1620
ggaagcaccg ggagactggg acaccactgc ccgccgcccg cggccctttg ttg
                                                                     1673
```

```
<210> 5569
<211> 2934
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2850)...(699)
<223> similar to gil665773 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5569 tttttttttt ttcgtgtggg ataatctatt ttaatgaaag tcattatata taatatttaa 60 caaaaagaat aaaggaaaaa gacaaaaaca aaaatagata ttccagctta ataaaaagta 120 caactgagca ctgtgggctg gaggtgggat acccacccgc agcacqccca ccctaatgtg 180 ccatctgagg gcctggagaa aggacagtgg gaaggagaca gtaggctcag cccagagatg 240 cccctgtcct caggggctca atgtagtttg accctgacat taaacctttt atgtccttcc 300 cagtcaggaa ggtggctggg tacaggggtg ggggtgagga gcagagagag gtacagggca 360 ggaaggaaaa agtagaaggg tootgaaggg caaattaggg tgggtaacta gggagttaaa 420 caggagcaag aagcttctat ttgtaatccc aaaatctggc atgagtagag aaggaagagg 480 aaatggggaa ggggtgatgg gaaaggggag cggaggaagg gaggcaattt atttatttct 540 ccctgtctct tttggatagt tccactcttt tatgttaatc ccaatctgag acaggcccag 600 ggaggttcca gtgacaaatt agtggttgtg tcccagtggg acagatgctc taggaaqtga 660 actgctgagc tggcaagaaa agctggggtc ctcctcagta tgacacagct cctggctccc 720 ggggagcaat gaaaaggaca tcagctttgg cattgatgca gtaggtgacg atgagggaga 780 agatgaggat gccgaagccc actgtcaggg tgatcaactc aagctctttg ctggcgatga 840 gaaatatccg ggcacggata tctttccagc ggctctcagt ccatgtagag tattcagtag 900 agetecaetg aeteagttea aaggeaggag acaaggeeet ggetaategt geagtagaae 960 gcacacaccg ggggagtcgg tccgtctcat tagaatgcaa agggccctgg acccatgagt 1020 actcatacag atccttgttt tcacttggga ctttacttgg atcctggcac tgctctcggg 1080 tgaggttgac cactgtgcca gtcaaatttg ccaaggcata ctgtaacaaa cataaatggt 1140 gttggtgggg ctggaaaca gcgatgtaaa tgttgaaaga ggccccgtca ccccaagtaa 1200 gaccttaggt ccctgccctg aaggatagac tggaaccatg agttgttggc tttaatcagg 1260 aaccccatag agcaggcggg taaccgtttg gggatcagcc tgaactgtgt cgctgaagtt 1320 ggttcctcct gcaagctcat acagagcacg tcccagcacc gtggccacat ctgccagggc 1380 cttggcagtg tcctgttaac caaagttcca ggtccctcct tcaagggctc aagccattcg 1440 ggatagctca cattaatgtt ctcagcagtg tcgtaaatac tctggtaata tttgttatgg 1500 aaggcaccag agtggtcagc cagaacaacg ccagagatgt ttcgagctcg aagaaatcgc 1560 tgcagggaag atggtgggag aggctgggac tgatttggcc tcctgaggat gacagcaggg 1620 acaccagcac cactettete caatgtggee aggagateet ceacetggtt cegtacagae 1680 tcatttttct gagaaacagg atctgtgtgc atccaaagct ctaatgaagt tcttaaggcc 1740 acctgtccca gctccacaaa tgagtcaaca ttctctaact gcacgggaaa cttgcccttc 1800 tccatatcgt agaccatcct cgagctgcca atgtagtcaa aagtttcccc ttgaaagaag 1860 acaaacatga cattgcgggg cagggtggtc acatcaggtg ccttttgcaa agcttcagca 1920 gcagccagct gggtgacaaa ggaagccact gcgctttcag cccctggggc ccacattcca 1980 gaaaaaggaa cgactatcca gccgggtggc agcaaccaca accctgtcgt caggctttaa 2040 tgtcccagtt gtatttatag gctttagcat gctccacaca ttgtaatcag acagggggtc 2100 acagacgatt tttgggttga tgctgaaggt gctttggatg gagctgcgcc gcatgccagg 2160 tggcagtgct gaatgacagc catgccatgt gtgaaaagag ctgcatggca catagtggga 2220 aggttggtgc tgagccattc tgactcaggt tgtgatcttg atagcactgc ttgatgactt 2280 tggtttcatt ttcatcttca agaagaaaga tggggaaact aaagtcttca taagccaaac 2340 cattgcccag cgaattccac tgtatttctc tgcagtgagc aaactctggc ccataggaat 2400 tggagtaaac accaaaccca tcatttgggc actgtacact aggagagaag cctgaggcag 2460 gactgggctt ggtcaaggac actgcaagac cagcaattcg gctggttctc cctttcagct 2520 tctccattaa atccctggta aaatgcttgc tctccagcag aaccatgtaa ggggggttgg 2580 ggccatcagt caatacccac tgtaggtcct cctctttctc tactacgtgg ataacccctg 2640 tgtctccact aattgaagac tggcagccaa tctgatgagt ggcgttgagc aggcgaacac 2700 agggagctgt tttatttaag gggatatata tetteetete eactgagttt eeectgeaca 2760 aacctgctag taggacgcag aaagacagaa ggcgaaggag accccgactt cccgggtcag 2820 ecccagagee accecetgee gragecatet tgeetetetg etgagegaaa geeccegtte 2880 ggctcctgtc tgttagcggc ctctctaggc taccactgac accgtctctg tggc 2934

```
<211> 3786

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (385)...(3787)

<223> similar to gi4324434 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5570 gtccgaattc ctggtcgacg atttcgtcaa atggcggcgg cggcggcggt ggcctggtgt 60 taaggggaga gccaggtcct cacgacccct gggacgggcc gcgctggccc gcggcagccc 120 ccccgttcgt ctccccgctc tgccccacca gggatacttg gggttgctgg gacggactct 180 ggccgcctca gcgtccgccc tcaggcccgt ggccgctgtc caggagctct gctctcccct 240 ccagagttaa ttatttatat tgtaaagaat tttaacagtc ctggggactt ccttgaagga 300 tcattttcac ttttgctcag aagaaagctc tggatctatc aaataaagaa gtccttcgtg 360 tgggctacat atatagatgt tttcatgaag aggagtgaaa agccagaagg atatagacaa 420 atgaggccta agacctttcc tgccagtaac tatactgtca gtagccggca aatgttacaa 480 gaaattcggg aatcccttag gaatttatct aaaccatctg atgctgctaa ggctgagcat 540 aacatgagta aaatgtcaac cgaagatcct cgacaagtca gaaatccacc caaatttggg 600 acqcatcata aagccttgca ggaaattcga aactctctgc ttccatttgc aaatgaaaca 660 aattcttctc ggagtacttc agaagttaat ccacaaatgc ttcaagactt gcaagctgct 720 ggatttgatg aggatatggt tatacaagct cttcagaaaa ctaacaacag aagtatagaa 780 gcagcaattg aattcattag taaaatgagt taccaagatc ctcgacgaga gcagatggct 840 gcagcagctg ccagacctat taatgccagc atgaaaccag ggaatgtgca gcaatcagtt 900 aaccgcaaac agagctggaa aggttctaaa gaatccttag ttcctcagag gcatggcccg 960 ccactaggag aaagtgtggc ctatcattct gagagtccca actcacagac agatgtagga 1020 agacctttgt ctggatctgg tatatcagca tttgttcaag ctcaccctag caacggacag 1080 agagtgaacc ccccaccacc acctcaagta aggagtgtta ctcctccacc acctccaaga 1140 ggccagactc cccctccaag aggtacaact ccacctcccc cttcatggga accaaactct 1200 caaacaaagc gctattctgg aaacatggaa tacgcaatct cccgaatctc tcctgtccca 1260 cctggggcat ggcaagaggg ctatcctcca ccacctctca acacttcccc catgaatcct 1320 cctaatcaag gacagagag cattagttct gttcctgttg gcagacaacc aatcatcatg 1380 cagagttcta gcaaatttaa ctttccatca gggagacctg gaatgcagaa tggtactgga 1440 caaactgatt tcatgataca ccaaaatgtt gtccctgctg gcactgtgaa tcggcagcca 1500 ccacctccat atcctctgac agcagetaat ggacaaagcc cttctgcttt acaaacaggg 1560 ggatctgctg ctccttcgtc atatacaaat ggaagtattc ctcagtctat gatggtgcca 1620 aacagaaata gtcataacat ggaactatat aacattagtg tacctggact gcaaacaaat 1680 tggcctcagt catcttctgc tccagcccag tcatccccga gcagtgggca tgaaatccct 1740 acatggcaac ctaacatacc agtgaggtca aattetttta ataacccatt aggaaataga 1800 gcaagtcact ctgctaattc tcagccttct gctacaacag tcactgcaat tacaccagct 1860 cctattcaac agcctgtgaa aagtatgcgt gtattaaaac cagagctaca gactgcttta 1920 gcacctacac accettettg gataccacag ccaatteaaa etgtteaace cagteetttt 1980 cctgagggaa ccgcttcaaa tgtgactgtg atgccacctg ttgctgaagc tccaaactat 2040 caaggaccac caccacccta cccaaaacat ctgctgcacc aaaacccatc tgttcctcca 2100 tacgagtcaa tcagtaagcc tagcaaagag gatcagccaa gcttgcccaa ggaagatgag 2160 agtgaaaaga gttatgaaaa tgttgatagt ggggataaag aaaagaaaca gattacaact 2220 tcacctatta ctgttaggaa aaacaagaaa gatgaagagc gaagggaatc tcgtattcaa 2280 agttattete etcaageatt taaattettt atggageaae atgtagaaaa tgtaeteaaa 2340 tctcatcagc agcgtctaca tcgtaaaaaa caattagaga atgaaatgat gcgggttgga 2400 ttatctcaag atgcccagga tcaaatgaga aagatgcttt gccaaaagaa tctaattaca 2460 tccgtcttaa aagggctaaa atggacaagt ctatgtttgt gaagataaag acactaggaa 2520 taggagcatt tggtgaagtc tgtctagcaa gaaaagtaga tactaaggct ttgtatgcaa 2580

```
caaaaactct tcgaaagaaa gatgttcttc ttcgaaatca agtcgctcat gttaaggctg
                                                                     2640
agagagatat cctggctgaa gctgacaatg aatgggtagt tcgtctatat tattcattcc
                                                                     2700
aagataagga caatttatac tttgtaatgg actacattcc tgggggtgat atgatgagcc
                                                                     2760
tattaattag aatgggcatc tttccagaaa gtctggcacg attctacata gcagaactta
                                                                     2820
cctgtgcagt tgaaagtgtt cataaaatgg gttttattca tagagatatt aaacctgata
                                                                     2880
atattttgat tgatcgtgat ggtcatatta aattgactga ctttggcctc tgcactggct
                                                                     2940
tcagatggac acacgattct aagtactatc agagtggtga ccatccacgg caagatagca
                                                                     3000
tggatttcag taatgaatgg ggggatccct caagctgtcg atgtggagac agactgaagc
                                                                     3060
cattagageg gagagetgea egecageace agegatgtet ageacattet ttggttggga
                                                                     3120
ctcccaatta tattgcacct gaagtgttgc tacgaacagg atacacacag ttgtgtgatt
                                                                     3180
ggtggagtgt tggtgttatt ctttttgaaa tgttggtggg acaacctcct ttcttggcac
                                                                     3240
aaacaccatt agaaacacaa atgaaggtta tcaactggca aacatctctt cacattccac
                                                                     3300
cacaagctaa actcagtcct gaagcttctg atcttattat taaactttqc cqaqqacccq
                                                                     3360
aagatcgctt aggcaagaat ggtgctgatg aaataaaagc tcatcccatt ttttaaaacc
                                                                     3420
aatttgactt ctcccagtga cctgaagaca gcaggtcggc tttcaaacaa ttcccctaaa
                                                                     3480
atcacaccac cccaacagat acatcaaatt ttgatccttg ttgatcctga taaattatgg
                                                                     3540
agtgatgata acgaggaaga aaatgtaaat gacactctca atggatggta taaaaatgga
                                                                    3600
aagcatcctg aacatgcatt ctatgaattt accttccqaa qqttttttqa tgacaatggc
                                                                     3660
tacccatata attatccgaa gcctattgaa tatgaataca ttaattcaca aggctcagag
                                                                     3720
cagcagtcgg atgaagatga tcaaaacaca ggctcagaga ttaaaaatcg cgatctagta
                                                                     3780
tatgtt
                                                                     3786
```

```
<210> 5571
<211> 6143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5492)...(2924)
<223> similar to gi1944416 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5571
cctgttatca gagagtaggg ccccctcagt ttatcgttta gacatcgcta agtgaaaaac
                                                                       60
agaagaccag gtttatttca tacaatgtta ttcacacatt tttcattttc taatttatac
                                                                      120
ataatataca aagaagtgaa gttaaccatt atttcatatg aaccaataag agccaggact
                                                                      180
tagacaaact ggtccagaaa caatccctat caaaaggaga cactcaagag taaagcctag
                                                                      240
gtagttttgc ccaattgttt tattctgaaa tgtgattttc agattttacc aaaatttcat
                                                                      300
gccaacttac taaaaggtaa aaattggggt gggcacccaa aatggcagac tgtaaaattt
                                                                      360
ctacaagaac aggtactttt gtagagcagg cctgaaagta ttgggaagat tgggttgtca
                                                                      420
gcactgggac aaatgggaat gagtatcagg accccaagaa gagggtttag tttctcaatg
                                                                      480
tagtattctc tacttgtcat tttctaaaat tgcagagata atgcctgtgc caacagaggg
                                                                      540
caaggatgaa ggaagactag gaattcaact gtacaaagac aggaaagcca ttaccaatct
                                                                      600
ccaacatgac agctttgatc ctgaaaccat gggctgatac tgagaacaaa agttcgatac
                                                                      660
gggccgaaat actctgaggt tggtaaagta ggaaaaagtg agacagcggc tttgtgtggg
                                                                      720
ttttaaaaaa atgaaacaaa cacaaggcgt tgctgcagtg actggggacat gctgatgacc
                                                                      780
cagagtgact atgagaagga acggtgacaa gtgtttggat ttaatggtct caccaaggaa
                                                                      840
tgttgggtta gaaaagtaaa ataactcaac accaaacatg aaaaagtatg cctggcatcc
                                                                      900
ccaaacttta tgccattatt tttaggttca taatatgaac aactaagtga taaaaccttt
                                                                      960
```

```
agattccata ttgtgctcag aagattgcgt ttcttctgca gatctctagt aaaaaaagat
                                                                     1020
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gtgtagttgc taggtcatct tttgttttcc caatttcttc aagtaaacct tgaactctac
                                                                     6060
tctccttatg aactacttca gaaaacaatt tatctttttc tgatgttatt atatggagct
                                                                     6120
cttcagattt gtcttgtatc tctttcctca gcctttctac ttcagaaggt aaagatttca
                                                                     6180
attctgaaag caaaatgact tcttcccgca aagcttcatt ttcttcaact tctttattta
                                                                     6240
qttctttctq aagatcagta atctttcctt ccaattccaa attacagagc aaatcttttg
                                                                     6300
gaactttgcc atctataagg gaggtgagtt ttgttatctc attaaaagca gattgtaatt
                                                                     6360
ctttctccag atcaacttgc attttctttt ttgcctccaa ttggctttga tataactgaa
                                                                     6420
tatcattttc catttgcttg tatgtagttg caagttcttt cattttctcc ttcaactcca
                                                                     6480
gattttcact tctaagaaag gctgattctc tcttggcatc aagggctaca gtttcagcat
                                                                     6540
caaacagagt ctgcttcatt tgttttgggt cttcaatgct ttccaatgag tatgacaagt
                                                                     6600
ccatttttat attttctagc ttttgagagt ctatgtattc ctgtagcttc ttaatctggt
                                                                     6660
cttccttttc tctaagcagc tctacttttg aactgagttc attctcaaga tcttgattat
                                                                     6720
atacttctcg atgcttaact aaattcttta agttcgaaat ttcatgaatt agttgcatct
                                                                     6780
cttgatcttt tttagttttt ctttctagag cctcaaattc atccaaatca ttctttctt
                                                                     6840
ttaatttcaa ttccatttct tcttttctg ttcgtagttg ttcatagtct aataccagat
                                                                     6900
tatcatagtc agcacgaagt gagttcaact cactttctat attctcctga tttagtagct
                                                                     6960
ttgttgctgg attccattct atctcactta atgtatcaag agtgttactg aaaacatcag
                                                                     7020
actctgaaca gacagattca tcaatttctc gtaataaatt tatagaaagc ttatgtgttt
                                                                     7080
ttgttgttat atttgttggt atattaaatt gatctgcata gtttgagttc ttcattttgt
                                                                     7140
taattttgcc aaggcaccaa gtaactcttc gttttctttt agcctttaat tcctgttgca
                                                                     7200
acgtgaggga agaagaggtc accagcatcc gtgttaagtt ttcaattttc tcattctgta
                                                                     7260
ctttctgaag caaatctttt tcttccaaaa gttgggccaa ttggtctttt tccattgcct
                                                                     7320
gagcccgcgt ctctaaagaa acctcctcta attgtttttt aagatccatt atttcttttc
                                                                     7380
tatacctttt caggagagct tcatcagttg atacctcatt aacataagga gtattcttca
                                                                     7440
tatatttagc agtactggca aactggagag cagtaagagt ttcatcaaaa gatactggag
                                                                     7500
taattgtgca gataatacgt gtctttggat ttcctcccaa ggaattctga agaattcgtg
                                                                     7560
ttaacttgct atctcgataa tttatgaaac caccaacttg tccatcacta agtttcttga
                                                                     7620
tcacttgtcc caaaataaat aagcttcgat ttatattaca gccttccttg agccgcacac
                                                                     7680
ctgcagcgcc tgtttgagca gctctttcac tgcctgcaag atcaaccaaa ttcaaatggg
                                                                     7740
ataccttaac agatccttca caattagaag gttcaccctt ctctctgctt tccaaaatca
                                                                     7800
teetaaagat ggtatgagaa egaetgette tttgatteat ttttgtttet eeataatgee
                                                                     7860
tgctcttttc tccctttgta atccatttca aagccatttc tgatgtatat acaacttctt
                                                                     7920
ctgtgagatc agcaacatac acattcctat tgacatcttc tcgaataatt aaaggtttca
                                                                     7980
ttttttgagt gccacagagt aaatctgtaa tggtttcatt gtatatttcc atgtaagata
                                                                     8040
```

```
cacgtaagag aaattcccta tccaggaaaa cttcttaaat tttttgggaa aaatgtccat
                                                                     8100
gaaattgccc ctggggtata actcccaaat gatcttctga acccatcatg gtatatgttt
                                                                     8160
ttcctgaagc cagtctgtcc atagggcaaa tatagtacca ttgtagcctt gtatggcaga
                                                                     8220
atcgatgatt ggtgctgcta ttggcttcat acacattttt gggagtttca ttaccatgaa
                                                                     8280
ggacacgate aaaattgaag gatttaette cateaactgg ataaatgaca ttattgtggg
                                                                     8340
ttttccagta aacttgggca gtttctccaa gtgattcttc tctgctgttc agcggccgca
                                                                     8400
ctcgcacgca gacggccacg gctccttcct ccgccatcct atcaggctga actggtccca
                                                                     8460
ccaaaatggc caggaccctc cgcggccggc acttcagggc tcacaggccg ccccgccttt
                                                                     8520
aaattta
                                                                     8527
```

```
<210> 5574
     <211> 940
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (34)...(365)
     <223> similar to gi4680709 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5574
tgattacgga agaaccagga gtttggcgtg accatgggga agcaaaagaa aacaaggaag
                                                                       60
tatgcgacca tgaagcgaat gcttagtctc agagatcaga ggcttaaaga aaaggataga
                                                                      120
ttaaaaccta aaaagaaaga aaagaaggat cccagcgcat taaaggaaag agaagttccc
                                                                      180
caacaccett cetgettatt tttccaatat aatacacage tgggcccace ttaccacate
                                                                      240
ctcgttgata ccaactttat caacttttcc ataaaaqcca aactggactt agtgcagtca
                                                                      300
atgatggact gtctgtatgc caagtgtatc ccatgtataa ccgattgtgt aatggctgaa
                                                                      360
attgagaaat tggggcagaa gtatcgagtg gctctaagga ttgccaagga tccaagattt
                                                                      420
gaacgattac catgtacaca caaagggaac ctatgcagat gactgcttag tacagagagt
                                                                      480
aactcgccat aagtgttaca ttgtggccac agttgaccgg gacctgaaaa gaagaatccg
                                                                      540
taagatteet ggagtteeta teatgtaeat ttetaaceat aggtgagaaa ttteeettgg
                                                                      600
agaagggaat agaaatatat aattgatatc aattgaaaat gaggataagt gataaggtta
                                                                      660
taaaggattt gaaagaaatt attgtatcaa atgtttacat agttatattt gaagaaatga
                                                                      720
gacaaagcaa gagcaagagc aaaagagaga gataggattt aaggaatgag gcaaacattt
                                                                      780
aaattgttag agtaagatta ctggaagaaa tagacgtatt qttttaaata aaagcagtaa
                                                                      840
tttaaatcaa gctaatcttt ttggccagaa atacctgttt tgaaagattt tttttatta
                                                                      900
acacttcatc tgagaaatgg aaagcttatt taaaaaaaaa
                                                                      940
```

```
<210> 5575
<211> 1595
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<210> 5576

```
<222> (407)...(687)
<223> similar to gil710216 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5575
ttttttttt ttgtattcat tatctgtgtt ctcttgtatc tccctgagtt tctttaataa
                                                                       60
cattattctg aattttttc aggcatttca tagattttct tttcattgga tctgttgctg
                                                                      120
gagaattatt gtgcttcttt ggagatgtta tgtttccttt ttcatatttc ttgcatcctt
                                                                     180
atgtgactat ctgtgcctct gacataacag tcatttcttc caattttatg gattggcttt
                                                                      240
tatatgggaa agaccttttc ttatagctct atctacagtg ttcattggat atcacacttt
                                                                      300
qqctttgatt ctgggtgggt acagtggtat agtctgcata tgattccttc agctgtaatt
                                                                     360
ggcatgagtg gtgcctgtga gtcattcagt ggcttagact gcagtgtttt tttttgtggt
                                                                      420
tgttgagatg gagtctagct ctgtcaccag gctggagtgc agtggcacaa tctcagctca
                                                                      480
ccgcaacctc tgcctcccgg gttcaagcaa ttctcctgcc tcagcctcct gagtagctgg
                                                                     540
gactataggc acgtacaacc atgcgcagct aatttttgta tttttagtag agatggggtt
                                                                      600
teactatgtt ggecaggetg etetegaaet eetgaeeteg tgatetaeee geeteggeet
                                                                     660
ctcaaagtgc tgggattaca ggcgtgagcc accacacttg gccagactgt agttgttatt
                                                                     720
ggaggctgtg gtgaggcttt gctgaggatg gggatgccag gaaqtcttqt ccttcaqcat
                                                                     780
cagtggtagc ggtggtggac caggtgtgtc aatactaggg actgtgggca gtgtttgtgg
                                                                     840
gcactgatga tagcctgtct gcgtgggcca atccctgqqc ctccaqqtqq ctcctttqqt
                                                                     900
tgctggcagt ggcagcactg ggccaagtgg gcaggtgcac cactgggctc ctgggtggtg
                                                                     960
tgcgtggcag gctgatctct agttctccag gtgacatatg caggttctgg tggtgggtag
                                                                    1020
gcaggcattt cctcaggcct ctcagtagta agtgtgagca ctagctctgg aggcagatga
                                                                    1080
gtcaatctcc aggcccccag atggtacatt caggcaccag catattccta tgcatttcta
                                                                    1140
gataaaagta tttttcagaa aacctgagca tatgtcctat taatacaact taccctcatc
                                                                    1200
agctctgcat gagaagaagg cgtaattccc tcagtagaac agtcagaatg gaatcacaga
                                                                    1260
cttgttttga gccagtcact ggtgaggggg ggtaggataa aatgataagc tcagaatcta
                                                                    1320
aaccttagac tagggaatgg caaacttttt ccataaagag gcaaacggta atattttagg
                                                                    1380
ctttttgtgt agataacctc ttttgtagtg acacagtggt gccatcgtag cctaaaaacg
                                                                    1440
tatgtagaca atggataaat caatggactt ggttttattc cagtaaaact taatttatac
                                                                    1500
agtcagaggg ccagatttgg cccttggtct atagttggcc aaccctgttt agagcagtca
                                                                    1560
aaatttattc cctggggctg ggccaacttt ttctt
                                                                    1595
```

```
<211> 2435
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1450)...(683)
<223> similar to gi5420389 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5576
ttttttttc attcacacac ttagcatatg caattttaat caaccaaaag aaaatcccaa 60
atgtacaagt gaaaaaaatc caaactgttg acacaggcct aactaatatc agctactttt 120
```

```
atgtacaget gtatagttea aaaaagetat eetatatgta tatacaaaag ttgtttatae
                                                                      180
acaggtctgt acataagggt ctatacattt atttcctcag aacccttagg tgccacctct
                                                                      240
tggtgaggac accaacactt cattcacata tcttacaaaa aagaaagacc atttccagga
                                                                      300
ttgacaacat tgtgcatcct gtattcagac aatgtacact ccactcgact ggttaagatc
                                                                      360
cttccatcat aatgcggacc acaccagatg catgggttcc accaaacagc ttcacacaga
                                                                      420
gtgctccaaa gtaaaagccc ataaaccaac ccgagatgaa gcagggtcct gcccagtgtg
                                                                      480
ccaccacagg tccgggctta gttgagtctg cctqccctqc tcactqtcqg tattccaatt
                                                                      540
catctacact gataactttg gcgggcatgg agggcagggg ttgctqtaqc acatctqaqc
                                                                      600
caaaccattt ggcaaggccc acaggggagc tgctcctctg gctggggcga tgctccagct
                                                                      660
gggagtgcat gtggggcagg cctgaccggc tgggcacgtt ctgaggggtt gtctgaacgc
                                                                      720
tgacagetge tgcatgggaa ceagageetg gaggatgeag aactgagege tgtagetget
                                                                      780
gttgcaccat tgccagatgc agaggtgttc caggacgagg gtttaagaga gggtgactag
                                                                      840
cagcaggtaa agggtaaaag ggctgaccca ggatggggcc agatattccc tgtaaatgac
                                                                      900
tcaagtccat cccaggagga agcacaccag tttggagcaa acttggaaga tgctgtggat
                                                                      960
gtactccctg ggccagcatc ctctgtacca accctgggtg aagctggtga gcaggcctaa
                                                                     1020
ccatagggac atgggggaca aggggaactt ggtggacagg gcggagaaaa ggtgttgtag
                                                                     1080
gaactgggga tgccaaggtg ggtgttttc tcccagttgc tttaggtcga taatcttgtt
                                                                     1140
ctttggtgta acggttggcc tgggacagtg gggtggaaca cgaagacctc tgtaatgctg
                                                                     1200
acagtttgga atttgtagtg ggagaagagt ctcgatcggc actgggtaca gagctggatg
                                                                     1260
acaggaggtt ttcttcactg gccttctgag tatcctcttt actgtcacca agagctqctt
                                                                     1320
ttccagatgc tggctcctcc ttgcttttct ctttgctctc gtacatctta cgaatcactg
                                                                     1380
aggtaggggt aaaggaagga gaaagcatgc ttgtgatgga ggcagcaggg gcaggggaag
                                                                     1440
aggaattccc tcgatgcacg ggtgctggtg acttggtcac tcgctgttgc ctgtttctga
                                                                     1500
atccatctct ggttctgtcc acctgtggtt tgccaaaacc aggctggtag aagtttgctg
                                                                     1560
cctgtacagc aaggtcatgt ggcaaggcca gcccttctaa agctgcctgt tgcaactcca
                                                                     1620
gctggctcat ctgctgggct gtgatggggc tcatgggttt gcgcatgcct tggaatggat
                                                                     1680
ctccgagtag ctgctgtggt cctggtgtga aaccaattgg tgatggtatt cttgggcgaa
                                                                     1740
ggtagtcagc tgaggctgct cgagtttgaa acacctgtga caagggagga gagggtgctc
                                                                     1800
tttggcccag taaagatgtt gtaggctcca agctccccat aaggccactc agaagattqg
                                                                     1860
aagaagcagg tetetgaact ggttgaeeca gaagtteetg eaggatgtte ttagggaeag
                                                                     1920
gctggcctgg aatctcagca ggggacatca aatggctttc aaggtttcgg ctgactttgg
                                                                     1980
gctgagaagg caaagtccca cttgccttca ttgtgctcac tagcttgttg aacgcagtca
                                                                     2040
tgtctccgtc tttcttcagt tgtcgattgt tggttacggc actcaaggtc tcttctaggt
                                                                     2100
gttctgccat gaagggagtt gaattcttca cttgctggtc aaccttcaag cccttcagac
                                                                     2160
ctgcttctac ctcctccact gaaagcacaa cccctgaatg tgagctttct ttaagttttt
                                                                     2220
ctttatttgc agaaaggctg gaaagaagag gtttcaaatc cactttggct ttctgtagca
                                                                     2280
tttctaaaat atccacttta ttttcagcat ggtcttccaa tggtatagga gcaaagtaat
                                                                     2340
teccegagtt etgtecagga gagaggatgg ettgetecag acetgeaagt etetetaget
                                                                     2400
cttcatgtgg tgttgaccca agactgctgg atcgg
                                                                     2435
```

```
<210> 5577
<211> 1640
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (35)...(1461)
<223> similar to gi182923 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5577
cggacgcgtg ggattctttt aatcagagtt agtaatgtgg acagtacaaa atcgagagag
                                                                       60
tetggggett etetettee etgtgatgat taccatggte tgttgtgeac acageaceaa
                                                                      120
tgaacccagc aacatgtcat acgtgaaaga gacagtggac agattgctca aaggatatga
                                                                      180
cattegettg eggeeggaet teggagggee ecceqtegae gttgggatge ggategatgt
                                                                      240
cgccagcata gacatggtct ccgaagtgaa tatggattat acactcacca tgtatttcca
                                                                      300
gcagtcttgg aaagacaaaa ggctttctta ttctggaatc ccactgaacc tcaccctaga
                                                                      360
caatagggta gctgaccaac tctgggtacc agacacctac tttctgaatg acaagaaatc
                                                                      420
atttgtgcat ggggtcacag tgaaaaatcg aatgattcga ctgcatcctg atggaacagt
                                                                      480
tctctatgga ctccgaatca caaccacage tgcatgtatg atggatette gaagatatee
                                                                      540
actggatgag cagaactgca ccctggagat cgaaagttat ggctatacca ctgatgacat
                                                                      600
tgaattttac tggaatggag gagaaggggc agtcactggt gttaataaaa tcgaacttcc
                                                                      660
tcaattttca attgttgact acaagatggt gtctaagaag gtggagttca caacaggagc
                                                                      720
gtatccacga ctgtcactaa gttttcgtct aaagagaaac attggttact tcattttgca
                                                                      780
aacctacatg cettetacae tgattacaat tetgteetgg gtgtettttt ggateaacta
                                                                      840
tgatgcatct gcagccagag tcgcactagg aatcacgaca gtgcttacaa tgacaaccat
                                                                      900
cagcacccac ctcagggaga ccctgccaaa gatcccttat gtcaaagcga ttgatattta
                                                                      960
tctgatgggt tgctttgtgt ttgtgttcct ggctctgctg gagtatgcct ttgtaaatta
                                                                     1020
catcttcttt gggaaaggcc ctcagaaaaa gggagctagc aaacaagacc agagtgccaa
                                                                     1080
tgagaagaat aaactggaga tgaataaagt ccaggtcgac gcccacggta acattctcct
                                                                     1140
cagcaccctg gaaatccgga atgagacgag tggctcggaa gtgctcacga qcqtqaqcqa
                                                                     1200
ecceaaggee accatgtact cetatgacag egecageate cagtacegea ageceetgag
                                                                     1260
cagccgcgaa ggcctaaggg cgcgccccgg accggcacgg ggtacccagc aaggggcgca
                                                                     1320
teegeaggeg tgeeteeca geteaaagte aagateeeg aettgaetga tgtgaattee
                                                                     1380
atagacaagt ggtcccgaat gtttttcccc atcacctttt ctctttttaa tqtcqtctat
                                                                     1440
tggctttact atgtacactg aggtctgttc taatggttcc atttagacta ctttcctctt
                                                                     1500
ctattgtttt ttaaccttac aggtccccaa cagcgatact gctgtttctc qaggtaagag
                                                                     1560
attcagccat ccaattggtt ttaggtcttg catatcagtt ttattactgc accatqttta
                                                                     1620
cttcaaaaag acaaaaaaa
                                                                     1640
     <210> 5578
     <211> 2020
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (268)...(1419)
     <223> similar to gi4220483 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5578
tagtcgattg tcacgtggca ggccagggga aggcgggact tccggcggcg aggtaaattt
                                                                       60
tttttttttt tttttttt tttattttct tccggtggct ggtctccggc ggccccgtcc
                                                                      120
ccgactgggc cccgtgcctc cccgcccccg cgtccccccg ccgcaagacc gagccgccac
                                                                      180
catgaagaaa ttctttcagg agttcaaggc cgacatcaag ttcaagagcg cgggacccgg
                                                                      240
tcagaagctc aaagagtccg tgggggaaaa qacccacaaa gagaagccca accagccagc
                                                                      300
ecceaggeeg eccegeeagg gacceaceaa tgaggeacag atggeageeg etgetgeeet
                                                                      360
agcccggctg gagcagaagc agtcccgggc ctggggcccc acatcgcagg acaccatccg
```

420

<210> 5579

```
aaaccagggc tgccttccag tgagaaagga acttcaagcc gaagccaccg tcagcgggag
                                                                      480
ccccgaggcc ccagggacca acgtggtatc tgagcccaga gaggaaggct ctgcccacct
                                                                      540
ggctgtgcct ggcgtgtact tcacctgtcc gctcactggg gccaccctga ggaaggacca
                                                                      600
gcgggacgcc tgcatcaagg aggccattct cttgcacttc tccaccgacc cagtggccgc
                                                                      660
ctccatcatg aagatctaca cgttcaacaa agaccaggac cgggtgaagc tgggtgtgga
                                                                      720
caccattgcc aagtacctgg acaacatcca cctgcacccc gaggaggaga agtaccggaa
                                                                      780
gatcaagctg cagaacaagg tgtttcagga gcgcattaac tgcctggaag ggacccacga
                                                                      840
gttttttgag gccattgggt tccagaaggt gttgcttccc gcccaggatc aggaggaccc
                                                                      900
cgaggagttc tacgtgctga gcgagaccac cttggcccag ccccagagcc tggagaggca
                                                                      960
caaggaacag ctgctggctg cggagcccgt gcgcgccaag ctggacaggc agcgccgcgt
                                                                     1020
ettecageee tegeceetgg cetegeagtt egaactgeet ggggaettet teaaceteae
                                                                     1080
agcagaggag atcaagcggg agcagaggct caggtccgag gcggtggagc ggctgagcgt
                                                                     1140
gctgcggacc aaggccatgc gggagaagga ggagcagcgg gggctgcgca agtacaacta
                                                                     1200
cacgctgctg cgcgtgcgcc tccccgatgg ctgcctcctg cagggcactt tctacgctcg
                                                                     1260
ggagcggctg ggggcggtgt acgggttcgt ccgggaggcc ctgcagagcg actggctgcc
                                                                     1320
ttttgagetg etggeetegg gagggeagaa getgteegag gaegagaace tggeettgaa
                                                                     1380
egagtgeggg etggtgeect etgeeeteet gaeetteteg tgggaeatgg etgtgetgga
                                                                     1440
ggacatcaag gccgcggggg ccgagccgga ctccatcctg aaacccgagc tcctgtcagc
                                                                     1500
catcgagaag ctcttgtgaa ataaaagcag ggttggcctc agccctgtgg gtctgtctca
                                                                     1560
tgctctccct gttcctctcc ccgccacccc agggcctcca agccacctct ggaaatactt
                                                                     1620
ggctctgccc catgggcacg ggaggggcgc cagccgtgga gctqtqqaat tgqqccccqt
                                                                     1680
ggcagagccc ccatcccttg ggggctgtgg ggatgcgccc aagcccccga gggagaggcc
                                                                     1740
tggggacacc aacaaatcta agccctccct agctgcttgg taactgtgtc atgaagctgc
                                                                     1800
eggacagaca cacgtggcat etceetggge aggagagcag geetgeagea tgggteeegt
                                                                     1860
tecegtgtge egtgggtgge agtggetgea eetggeacta gggetgetet gtggatgtgg
                                                                     1920
gtgacaacgg caggagggga cgctggcctt cctgcacata gacctgcagt tagtaaatca
                                                                     1980
taagcccaaa taaacaggtt gtttgaatat aaaaaaaaa
                                                                     2020
```

```
<211> 861
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (745)...(191)
<223> similar to gi505096 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5579
ttttttttt tgcaaatcag cagatttatt gaggccacca gcgccactgg ggagcagcgc
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                                                                     120
atgcagtcct gcgcagccgg agggggatgc gcagggactg cgctgtgggc gccgatggtc
                                                                     180
agccatggtc agtctgtccg cagccagctg cccttctcct ccacctcctt ggtcactacc
                                                                     240
agcagcacct cgcacaggcc ctgggccagc gcagccgcca ggaaaggccc ctgactccgt
                                                                     300
cctcaatccc ccagggcctt cgggcgcccg cagctttgga gtccaggttg tagtaagaca
                                                                     360
ccgttccaac ctggcgcagg gccacctaag atgccgccgg cgcagcggca gtgacagcag
                                                                      420
ecceagegae acgggegagg geaggtteag gateageece agtacetggg geagggecag
                                                                      480
etgggacagg ggccteetce tgtcccacca cacggcggce aggcccagce cctgcagage
                                                                     540
ggccatgatc acattgacat catagttgcc ggtgcccagg aggctgcgat gagggttcag
                                                                     600
```

```
ccgggagtctggggccaacctcttgcagatctcatcggcagcctcctggctaaagagctgctgctgcagaacgttgttgagggcgtggacagcacacagctccaggcgctgccgttcgtggtacacggtgggtgggctcggctgtgctcccggggcctgggacatgccgtcctcggctcctgcccgcctgcctctccgctccaccgagccagggtttccgcatcccttcctgggcggcggctcgcgatctagaactagt
```

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<210> 5580
<211> 6204
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6085)...(2968)
<223> similar to gi3800881 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5580 ttttttttt ttaactgatg ttttaaattt aagtcattta ttttacaaac agagactacc 60 tattatactt aagacattgg gttagatctt tgccaaagac atggtttagt catacctaat 120 gtaatccatt ttttaacttt ccatattaat ttaattttta attcattttt ctttatgctt 180 gcttcagggg ctacatctgg gactgaatag cagcatatgg cccaagggct ggtgggtttt 240 gccactcatg ctctatactt ttagtctttt ccagagttga gtatagcagt cacgtatcgt 300 taatacaggg tgtcactatt ttattacctg gcagagaaac aggattaact tcctttattt 360 aatactgata aatagaaagg ctttttcaag aaaaaaaaag aaagcttaca tttacaaaag 420 tgatttatgg taatatgtgc cattaacaaa gacaaatact gaaatccaca caaaatcaga 480 attaacttct acaactaaaa aaaaattaca gggtaataaa actgtaggaa aagctgtatg 540 taaaaagaaa aaaagacaag tooctatgta gotaattaca agagaatatt gtaaatacat 600 tcaaaaaagt tttccaaaaa tcctgcagcc tcatctagaa actgatacat gttaagattc 660 ttgatctata ccaaattata atgttaaagg aaatcatgaa aactgaggta tatatttgat 720 gcattagaaa ctatcatttg aacactattt aaatagttta attataaggt ctaatttcaa 780 gttaaagtct gtaaacggag attagtttgg attatatqac acaqqaqaca ataaaacatg 840 ttctcaaaga catgccaata cattttcttg aaacaaaacc tcagcaaatg agaattttca 900 tactgtgcat gggaataact aaaaccttta ttagatatga ttttccatta acaataatgt 960 gaaaattaga attatgaatt caaaaagcag tgaagtctga aaatttaaaa agtagactag 1020 gtattagggg attaaaggta aaggaagacg agaatgtttc tttaatacta ttcattattt 1080 eccetetgta cacaatgttg catatataca actaetteat ttttattgae tttatataat 1140 agtgaaatcc ctttaagcaa cctagggtat acagttggtg tccaactttc aggggatttt 1200 cgggggggag tagaaacact tgattaacag ttttcaccca cacacgttag acaatttttt 1260 tctttttttg ccaagatttt agtagtaaat tcataaatat aggaaatact ttcactctt 1320 cagtgttaaa atagaaaacc aaacagtgcc aacagtagtg gcttaattat tggtatacaa 1380 gaaaaacaca acaacaatgg gttttcttaa ttacgcattt taaatatcaa tatgtgcatt 1440 tgtttttaca gttataaatt tttttctcac ctgttttaga caacagcttg taatagtttt 1500 gaatccatta agatgttgct ttcaatttga aatattttgt gtatacatgt atataaaaa 1560 taacccaatg tatgactcat ctgaccgatg tttaagatca ataacggctt atttttcaac 1620 atgcagttag gaagagggg aagcaagcca acctctctac agtatctttt tgctggcttg 1680 tttttgtagt ggtatcaata gtggtttttg gagggaacca tgtgccttca gcctatctag 1740 tcaagatcag ataccacgat caacaagagc ggtagaagag atggggaaag gggagtgggt 1800 aagtgttaaa tatcaatttt gtaaagtgtg cattttgtac teettetagg cacaggatta 1860 aaaacaggcc aatgaggaaa aatttgttat aattaggaaa aaactgcaat caaatcaaga 1920

cataatagcc gaattaagtt cttttaatag attgcatata tagatgttta gccatactct 1980 tagatcaact ctttaagagc agaactttat atccaattta catgctctag ataccacctt 2040 ttttattttt tacagtaagg tctggtattc aaatacccac ttgtacactg acagctttaa 2100 gaaaaacagg acacagaggg agttgtcatt tttagcagca atgaaatacc actaacccct 2160 ttttacatac cgaattcaag tcactatcag aggtgagtgc accacaaagt caccaqgtac 2220 aaaattgcta gttcattttt aaattaataa cttgaaatta cccctgcccc ccacccatt 2280 acatcttttt ataaacagca aacattttgc tatttttaat accatagggc taggcaggct 2340 tgtttcaata tgaaagtgct aattcattta cagattttta taatcagtta tgtaqtgcta 2400 caataaatgt ccaataatct acataggaac aatgatgaaa atgatgaaga ctgaataagg 2460 ctatcagatg accttatctt atttacatat aaagaataga tacccaatgg tgaggaagag 2520 acagaaattg gacaaatact cataggtgta aaaattacat ctacctttga gttttatact 2580 gtaaatgaga cattttaaat agtcctgtag cccatgccta ttttttcctc agaaaaagaa 2640 aagctgcctt catgacatcc cctcgtttca gatttccaca gtgtcacttt gaagcttcag 2700 agtcaggatc ttactttctt caaaaaataa agaaaatact cccctcctaa ggtacctccc 2760 atccccccc acccccaaaa tcccgctgat ttcttttcca gtgccaggtt gcatgatcag 2820 gtcccatctc ctggggttgt tgtttctttt gtccatctat tgattattag tttagaatag 2880 ataacatgaa ccagttctgg aaccactact aggaggaaca caagctcttc actacaagca 2940 cacagcagga aagaaagaga taactcaatt catccctggt gctgggcctc caaaattgaa 3000 agaacttggc acaactggga gcactgaatt tgtatcctcc atgcttctca atcattttgg 3060 atteatggge tgetettett tgateageea gagttgetat gteetgtaae tgttttettt 3120 gttcttcatt aagaccgtga gtcagtgcct gataccacac aggattacga ttttgaatag 3180 tttgaaagat agctttaaat atctgatact catcaacagg gttatcttca tcatcaatga 3240 ttgtggaata gccttccaga gcagtctctt cagcatcatc ttcttcccaa tcttcatcat 3300 ctccatcttc accagcctgc ttagccagaa tctccaaata ttcttgccca tcttcatcaa 3360 tatcatcttc atcactcccc agttcctcgg tttcatcatc atcttcagct tcatcatcat 3420 catcactgtc attctcatgt tctgcatggc aggcatatgc tcttttcaat ccqttaaata 3480 aaaggataaa agctggcaaa atctgtccag aaacctgatt taaaccttgg ggtatctgtt 3540 ccatatcaat aagagcacag agactgagaa cacacatcct tctgtcatga agccccaaga 3600 aacagtcaac atcattaagc cactaataaa atgatttgta actggttcaa cattattagg 3660 gaagtgaaga ttttctaagg tatttagtaa taggtatgca ttataatgta aagctgcaat 3720 tgcaacttgc agacccatag ttcaaagttc acttgtctta acctctcttg tcagtctttc 3780 taaggctgct tccacgaata agggaatgca ctggtcaatg ccacgccctt tgcactgcag 3840 aatgatgacc tctaacaatt ttgctgcatg acactctgca tcttctcctg caactcctgt 3900 aagaaccttt ttgcacatac tgtatatcat ttcaagatac ttggtgtcag acagaagtgt 3960 gtctgtatca actgttacat aattatgaag gaggggcatc atatctgtaa agtaatcaaa 4020 gccatcttgc tgaaagactt caaatacaag gggtagtagc tgccacatct gtggagacac 4080 ttgttgacat gtcaaactgt gcgctaaaga gaagatctcc tcatagaatt ctaagacatg 4140 ctgttgtaaa acagtaccaa tgacctgtaa gcagattccc tcaagctgtt gggttatctc 4200 tttatgatct tcaactacac taagaagtgt atcaattgta ttcagaattc ccatagcagt 4260 aactgctttg tcatcactac cttcttcatc tggccccgtc tggattactt ggttaaatgt 4320 cattgccaaa tgttgtgtca tttctactgc aataggagta acttcttcac tatattcaca 4380 gatcattttc tgaattacat tggtaaggtc atcattttct gtttctctta taatgtgaag 4440 aagagcctgc attacaggtc tgatgaatgg tgtgatatat tctttagctt tttcttgatt 4500 gctgatcaat acttgaaggg caatggcagc ttccactttc acaggcattt ctctatcatc 4560 aatcagacat cttcttgtta gctctaaggc tgtttgaagg ttctgatcac ttttgaactt 4620 cacttcacaa aaatagtgaa gtacccagca agcccttgct ctcatgtagg cctagttcac 4680 tgctggaaga gaggggaata catggattct ggcaacatgt attccatctg atctttatag 4740 gatctttttc ttcagaagta tttcagctaa agagccaatc atatgcaggg ctccatcttt 4800 ttttcgaggg tcagcatttg gttctgtaag aatctggtaa caaaatccca tagtcttttg 4860 cagtacctct ttcctcttac tacaggctgt aaacaaaagt gtctgggcag cagtggtagg 4920 agaaatgaaa tetteaaaca cateaaaett eatgegtata tattegtaag ggtettettg 4980 ccaaagttcc tcatcagcat ctgtatagca catcaatgga aaaataacat cttggataat 5040 gccttgtata tggggcttca gattcttcca ggtgagagca tgagaaactc cttgattaat 5100 ataatttaat gtctgttgta aaactcgagg agccatatat tgcttctcct tgtactgata 5160 taacaccttc aataaaactt gctggacacc aacagcaaat gccttcagaa atacttcagc 5220 aaattcatta tactccttgg aaacattgcc agggetteca tatettteaa aaagtettge 5280 taaaatatgt aaggcccact tettgeattt ceaceatggt aacteaggte gateatette 5340

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actccgctcc tctggttttt tatactcata atttttcaca agctgataaa ggcaaagaag
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aattcctagc caacaagcac tgttatcgga ctgaagataa aagccaattt tgtccacaat
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ggcagtccag cggcttggat aatcatgttt gatgatgtga tgaatgcatg tagtaagctg
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taccctgatg agctcaggag aatggataat ggcttctaca atattttctc qaatacaatg
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gcgatcttct tctggaatag tataagggga tatatcccct ggtgctgttt ctcgatcagg
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ccaatactgt gttatcatat ttttcagata gataacacct gcctgtctca caggtaaatc
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cagctgttcc gacatagtaa tctggagcag tgttgagaca aaattcagag acttgtgtgc
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ctcgataatg gtgttggggt ccatcgcagc gcggactcgg tcaaacccgg qqctcqqqtq
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ctactgggcc aggaatagcg ccactcactg cgcacatgga cccgccgcgc tccgcagcgg
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<210> 5581
<211> 5235
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (290)...(2497)
<223> similar to gi5163089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5581 gccgccggaa ctggctgttg gtgggggtgc agcactgagc cgccgacggg gcgggtgggc 60 tttgctgccg agcaggcggc gccgtcttgg ggcctagcgg cgaggcgacc cgcacaggtg 120 ggcggtggcg gtaggtgggt ggccagcgac tggcaacgcg gtggcttaga cgcgcgagat 180 ccggccaggg tcagagtact gtaagattga tqttaaaqqc atqqtqttca ccccacttca 240 tcagcgtaca taagttatct cttcttttgg accettattt tatgccataa tgcaacaage 300 tttagaacta gctttggatc gtgcagagta tqtcattqaa aqtqcccqac aqagacctcc 360 taaaaggaaa tacctatcaa gtggaagaaa atctgtattt caaaaacttt atgacttgta 420 tattgaagaa tgtgaaaaag aacctgaagt taagcagaaa ttaagaagaa atgtgaactt 480 tgttagagaa gcttgttatg caagaagact tttgtcatgt ttagtgggtc aatctatacc 540 ccaggaaatg agggatattc tctgatgctc aggggaaaaa acggatcaga ttccqagacc 600 attcgactgc cctatgaaga aggagagttg cttgaatatt tggatgcaga agaattacct 660 cctattttgg ttgatctcct agaaaaatct caggttaata tttttcattg cggatgtgtc 720 atagcagaaa tacgtgacta caggcagtcc agtaacatga aatctcctgg ttaccaaagt 780 cggcacattc tcttacgtcc aacaatgcag actttaattt gtgatgtaca ttcaataaca 840 agtgataacc acaaatggac ccaggaagac aaacttttgc ttgagagcca gctcatccta 900 gctacagctg aaccactctg tcttgatcct tctatagcag tcacctgcac tgcaaacaga 960 ctgctctata acaagcaaaa gatgaacact cgcccaatga aacggtgttt caagaggtat 1020 tecagatect etetgaateg geageaagat etateteatt gtecaeetee teeteagetg 1080 aggttacttg atttcttaca aaaaagaaag gaaagaaaag caggtcagca ttatgacctc 1140 aaaatttcta aggcaggaaa ttgtgtagat atgtggaaac ggagtccctg taatttggcc 1200 ataccttctg aagtagatgt ggagaaatat gctaaagtgg aaaagtctat caaatctgat 1260 gactcacage caacagtetg gecageeeat gatgtaaaag atgattatgt atttgaatgt 1320

gaagctggta ctcagtatca gaaaacaaag ctgaccatct tgcagtcgct tggagatcca 1380 ctttactatg gtaaaataca gccatgtaaa gcagatgaag aaagtgacag ccagatgtct 1440 ccatcacact cgtccacaga tgatcattca aattggttca ttattggatc aaagaccgat 1500 gctgagaggg tagtcaatca gtaccaagaa ttagtccaga atgaagccaa atgtccggtc 1560 aagatgtcac acagctccag tggctcagcc agtctgagtc aggtttctcc agggaaagaa 1620 acagatcaaa ctgaaaccgt gtcagttcag tcttcggtat tggggaaggg tgtaaaacat 1680 cgacccccac caatcaaact tccctcaagc tcaggaaata gttcctcagg taactatttt 1740 acaccacaac agacaagcag ctttctcaaa tctccaactc ctcctccttc ttctaagcca 1800 tcaagtattc ctcggaaatc atctgtggat ctcaatcaag ttagcatgct ttctccagct 1860 gccctatcac ctgccagctc atcacaaaga accacggcca cccaggtcat ggcaaactct 1920 gctggactta acttcatcaa tgtagtgggc tctgtttgtg gggcccaggc tttgatgagt 1980 ggttcaaacc ccatgctggg ctgtaacact ggtgccataa ctcctgcagg aataaacctg 2040 agggggcttc taccctcagg aggtctgcta ccaaatgcac tgcccagtgc aatgcaggca 2100 gcttctcaag caggtgttcc atttggttta aaaaatactt caagtctcag gcccttaaat 2160 ctactccagc ttccaggtgg ttcacttatt tttaacactc tgcagcagca gcaacagcag 2220 ctctcccagt ttacaccaca acaacctcag cagcccacaa cttgtagtcc tcaacagcca 2280 ggggagcagg gttctgagca aggttcaacc cagtcaagaa caggccttat ctgcctcagc 2340 aagctgcctg ttattaacct tactggagta ggaagtttta tgcaqtcaca ggcagctgca 2400 2460 acatcatcat cggcatacag gcagccagtc aaaaagtaaa atgaagagag gcatgccaac 2520 cactccaaaa ttttgagtct tgcattactt tttgttcctt ttttaaaaaac acaagagcac 2580 tgaatcaaaa gaattgagtt tctacttttt gtttttttta atgtgtcagt attttacatt 2640 gctagatgta caaactttat acagaagcac aaccttatca tttttaaata aaaacaqqqa 2700 aatggtttaa caaactaggg ttggtttgcc taagtcattg ctttttaaaa atggtttcac 2760 tatacataat atatatggaa gtgacctaag aaataataga aacatctttc agaaqaatgt 2820 agtttgatat ttatttagta taaaacgttt gtgcacagtg ttaacaaata caatttttac 2880 aaatctgttt tgaaaatgtg gtggctgttt atttgggttt catactctta attacttcat 2940 ccatcagttt tttaacttct ttgtgtcttg taactgctcg gctcatacag tcctgaagtt 3000 tagctccagt tagcccactt ccacctggtt tgtgaagaca acagagtttg ccttcctcat 3060 ccattactat tgttaaggtt cctgttgcca gatgttcctc ctctccagta gggtcaacta 3120 taagcaaagt gtcatcaaac acagcaaagg aagttgcaac tggatgagtt ctaatattca 3180 aataactttt cttctttaaa ttaacttctg ctaaaggcgg tttcttcatt tatagtaact 3240 tcaggcaact ggtacatttt ttaaaagccg cctagcaaag caaaatgtgc aggcatccca 3300 aaatgtttcc catcgtagtc gaggcaaatg agatcacagt atagaaccca gacaagcttt 3360 cctggagaaa tgcataaggt cctctttctg aattatctgt gaattttcaa tgacatctgc 3420 aatgaactgg ctagccactt gggcctcttc tccaggaggt ccagaccgga atcaacgtat 3480 cctttatcag gggcatctgt tgatggtgct gcaaattcct atagtagcaa agaaatgttt 3540 cctattgaaa gaagctactg aaaaattatg aagacaattt agcaatcagt tatggaaggc 3600 tctatcaaat atcagcttag ggaattgtgt cagggcctct acggacattg gtgctgatcc 3660 3720 ctcggcaaga ttacctggag atcttttaaa aaatagtaac tgggtttgtg cccccaacta 3780 ctagccaaga atcttaattt gttctccaga tgatagagca agatttagga actgctgctt 3840 tagtggtaaa gagcaaaagc tcagctgggc gcggtggctc acaccggtaa tcccagcact 3900 ttgggacaca gaggcgggcg gatcacctga ggtcaggagt ttgagaccag cctggccaag 3960 atggcaaaac cccgtctcta ctaaaaatac aaaaattagc caggcatggt ggcgggcgcc 4020 tgtaatccca gctacttggg aggccgaggc aggagaatca cttcaaccca ggagacggaa 4080 gttgcagtga gctgacatcg tgccactgca ctccagcctg ggcgacagag caagactccg 4140 tctcaaaaaa aaaaaaaagc aaatgctctg caattactaa gccagttcaa atgtcagagc 4200 catacttact ggctgagaga cttcaggcaa gttatttaac ctcttacctt aaactcctca 4260 tcttgtcaaa tgggaagaaa atagtgtcta ctcctaggga ctgttaataa gggccaaatg 4320 agatagacct gttaaatccc aggcataaaa cctgacaagg agcaagttct caaatcttac 4380 tgttatacat cactccaggt ttacgaaaga agaatctcaa ctgaggttaa ataacacagg 4440 gtagactgta gtcaaagaag cacaggcttt ggagtcagat ttatgtctaa qttttactta 4500 tgagtcttat gtacctggac aggttactga aagtcatctg taaaacagga ggtgaagaca 4560 agtaacaaat gattgttata ggcattaaag tggataattc tgtaaaqcac ctaaaaaggt 4620 gtctggaaca tagcaagtac tcagtaaatg gtagccagta ttccctcaaa tttttctttt 4680 caacaattte aattttetae acatttacae agattacatg teateaetgg etaaaaggat 4740

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gtcaccaaaa atctgttaat gtctcaaatg atataacaat ttttttaaaa tggtgactca
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gggtcatatt atctaacact catagtgaaa gctcttggga aattaaacat taaaaattga
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cacccaacta ccaaatcaag agtagaatta caggtgtata ttacaatcta ataaataaag
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ctaactttgt aactcaaatc tcaataggac atatttagac ttactgcttt aactccacag
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attactgtag tatttcccaa cttcactaaa gcagaaccat ctgcggtact aattgaaccg
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atgttgacag ttgtggttct gaattcacca agttctcttc catcaggacg gcagttctct
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ccgcccgcgc gtctg
                                                                     5235
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120
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                                                                     240
gatggtgagg gcatgggaag cagatgctgc tgagggtggg tggagggaga aatggagacc
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cagcacccag caggggagc caggtgacag caggggaagc agatggcagg qccccaggca
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gtccaggacc ccaggctctg aagggtgggg caagggggtc aggtcacgtc ttgacatcca
                                                                     420
gcagtggcat ccgcttgtgc tggtagccac tctgccagcc atgtaccacc ttggggtctc
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ccatgtcaga gagcagctcc tgctcagcct catgcagttc ctcagctggg tcatagctqt
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acatggggag caggtgatgg cgcagccggt ccacccgctt tttcttctgt acatacatta
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ccacagccac caccacccg accagggtga tgaggaagaa gggccccaac acatagccca
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ccatggagtc gctgttggcc tggggggcat tgggcacaqt ggtgttactc atgacatcag
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cagccggagg gctgggtggt cagcatgggc agtggcgctt cgggagggcg cctccactqq
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gctccctccc gccgctgcag ccccgacagg aacgccctcg gttggctccc gggccccgga
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<211> 4326
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (84)...(3919) <223> similar to gi5689551 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5583 tocaggetet gegtgataag etgtggatet teetggttea gtetttetat getgttegte 60 acacagaaag ctggaagctg atgagcacag atgatcaaca gaaaatccaa gcagctgcat 120 ttgacaaagg tgatgatcga agacttggca aaaagcctat attcagtagc tcgcagcaaa 180 240 aagagtgttg gagttatctc tctactaata aaaagatgaa atctgatgga ttaggagcat 300 ctggacattc gtcaagtacc aatagaaata gtataaataa aactctgaag caagatgatg 360 taaaggaaaa agatggtaca aaaatagcat ctaagattac aaaagaacta aaaactgggg 420 gaaaaaatgt ttctggaaag cccaaaactg taacaaaatc caaaacagaa aatggtgata 480 aggcacggtt ggaaaacatg tcacctagac aagttgtaga aagatcagca acagcagcag 540 cagcagcaac tggacagaag aatttactaa atggaaaagg agtgagaaat caggaagggc 600 aaatttcagg tgccagaccc aaggtactca caggaaactt aaatgtgcaa gccaaagcaa 660 agcctttgaa gaaagctaca gggaaggatt caccatgcct cagcatcgca ggaccctcca 720 gcagatccac agattcaagt atggaattct caatttccac tgaatgtctg qatgaaccga 780 aagaaaatgg atcaacagaa gaagaaaagc cttctggaca taaactatcc ttttgtgatt 840 ctccaggaca gatgatgaaa aacagtgtag atagtgtcaa aaattccact gtagccataa 900 aatctcgacc tgtttcaaga gttaccaatg gaacttccaa taaaaaaagt attcatgaac 960 aagacactaa tgtaaataac agtgtactaa agaaagtcag tggcaaagga tgtagtgagc 1020 cagtaccaca ggcaattttg aagaaaagag gaactagcaa tggatgtact gcagctcagc 1080 agaggacaaa gagtacccca tctaatctta ctaaaactca aggatcccaa ggagagtcac 1140 caaactcagt aaaatcttca gtctcttcaa ggcagtctga tgaaaatgtg gcaaagttgg 1200 accacaatac aactacagag aaacaagcac ctaagagaaa aatggtcaag caagtacaca 1260 cagctttgcc taaggttaat gcaaaaatag tggcaatgcc taaaaatcta aatcagtcaa 1320 agaaaggtga aactttgaat aataaagatt caaaacagaa aatgcctcct ggacaggtta 1380 tatcaaaaac tcagccttcc tcccaaagac ctttaaaaca tgaaacatct actgtccaaa 1440 aaagtatgtt tcatgatgtg cgtgataata acaacaagga cagtgtttct gaacagaagc 1500 ctcacaaacc tctcattaat cttgcatctg aaataagtga tgcagaagca ctccagtcat 1560 cctgcaggcc tggacccaca aaagccatta aacgatcaag aaaaagagaa gttggcgtta 1620 gaatgccaaa atatttcaaa gctggataaa tcattaaaac acgaactgga atcaaaacag 1680 atttgtttag ataaaagtga aacaaaattt cccaatcaca aaqaaacaga tgattgcgat 1740 gcagctaaca tatgttgtca ttctgttggg agtgataatg taaattcaaa attttatagc 1800 accacagece taaaatacat ggttteaaat eeaaatgaaa acteettgaa etetaateea 1860 gtttgtgatt tagactcaac aagtgcaggg caaatccatt tgatatcaga tagggagaac 1920 caagtaggga gaaaagatac aaacaaacaa tcaagtatta aatgtgtgga agatgtttca 1980 ctgtgtaatc ctgaaaggac aaatggtacc ttaaattctg ctcaagaaga caaaaaatcg 2040 aaagttootg tggaaggact gacaattoot agtaagttgt cagatgaato tgotatggat 2100 gaagacaaac atgctacagc agactcagat gtatcttcca agtgtttttc gggacagcta 2160 tcagaaaaaa attctcctaa aaatatggaa acatcagaat ctccagagag ccatgaaact 2220 ccagaaactc catttgtggg tcactggaat ttgagtactg gtgttctgca tcagcgagag 2280 agtoctgaat ctgacactgg cagtgotaco acotoctocg atgacataaa goocagatot 2340 gaagactatg atgctggagg gtctcaggat gatgatgggt caaatgacag aggtatctct 2400 aaatgtggca ctatgctgtg ccatgatttt cttggaagaa gtagcagtga taccagtact 2460 cctgaagaat taaaaattta tgatagtaat ttaagaattg aagtaaaaat gaaaaagcaa 2520 agtagtaatg atcttttcca agttaattca acgagtgatg atgaaatccc taggaaaagg 2580 ccagaaattt ggtctcgatc tgcaatagtt cactctaggg aaagagaaaa tattccacga 2640 ggcagtgtcc agtttgctca ggaaatagat caggtatctt cttcagcaga tgaaacagaa 2700 gatgaaagat ctgaagctga aaacgttgca gaaaatttct ctatatctaa cccagctcct 2760 cagcagtttc agggaataat taatttagct tttgaagatg caactgaaaa tgaatgtcgt 2820 gaattttctg caaataaaaa gtttaaaaagg tcagttttac tttcagtcga tgaatgtgaa 2880 gagetgggat cagatgaagg agaagteeat acteeettte aggettetgt agattetttt 2940

```
tcaccttctq atgtttttga tggcatttct catgaacatc atggaaggac ctgctattcc
                                                                     3000
agattotoac gagaaagtga agataatatt ttagaatgta aacaaaataa aqqcaataqt
                                                                     3060
gtatgtaaaa atgaaagcac tgtcttggat cttagtagca ttgactcttc aagaaaaaat
                                                                     3120
aaacagagtg tttcagccac agaaaaaaag aacacaatag acgtcctatc cagtagaagc
                                                                     3180
agacagcttc ttcgagaaga taaaaaagta aacaatggaa gcaatgtgga aaatgacatt
                                                                     3240
cagcaacgca gcaaattctt ggatagtgat gtaaaatctc aagaaagacc atgtcacttg
                                                                     3300
gatcttcatc aaagagaacc caattctgac ataccaaaga acagctctac aaaatctcta
                                                                    3360
gactcctttc ggagtcaagt tctgcctcag gaaggtccag tgaaagagag ccattctaca
                                                                     3420
actactgaaa aagctaatat tgctttatct gcaggagaca tagatgattg tgacacactg
                                                                     3480
gcacaaaccc gcatgtatga ccatcggcct tcaaaaaccc tgtctccaat atatgagatg
                                                                     3540
gatgtaatag aagcatttga gcagaaagtg gaatcagaaa cacatgttac agatatggat
                                                                     3600
ttttaagatg accaacattt tgcaaaacaa gattggacac tactaaagca actgctctct
                                                                     3660
gaacaggatt caaacttaga tgttacaaat tccgttcctg aagacttaag tttagcacag
                                                                     3720
tatctaatca atcagacact acttttagca cgagatagct caaaacctca gggtataaca
                                                                    3780
catattgaca ctttgaacag atggagtgaa ctaacatctc cacttgattc ctcaqcqaqc
                                                                    3840
atcaccatgg ctagtttttc ctctgaagat tgttcgcctc aaggcgagtg gacaattctg
                                                                     3900
gaactggaaa ctcagcatta agtgttaaca ttttggaaaa atttatgcca ctcctttatt
                                                                    3960
ttttgatgcc tatattatat ccaaatgata attgcattag ccggatataa actttcttta
                                                                     4020
atattgagtc tttccaattt aatgaggtaa acatagttta tttattaata tatcacatat
                                                                     4080
agaaaaatgt ttttctaaag tttttgagca tgttttctct aattattaga gaaattagaa
                                                                     4140
gacttataag gaaaccctag cttcagtttt cctttcctag ctgatgattt gttcacttaa
                                                                     4200
tcattattca agaatttaaa atgtgaatgc agaagtagat cagtcccttt actttttgct
                                                                    4260
ctgcataggg taacatagta atttaacaat aaaaacttac cgtgcttgtg tccattaaaa
                                                                    4320
aaaaaa
                                                                    4326
```

```
<210> 5584
<211> 6329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(6330)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (124)...(5558)
<223> similar to gil665781 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5584
geggeegeeg geeteetagg agegetgeae etggtgatga eeetegtagt ggetgeggeg
                                                                       60
cgggccgaga aggaagcatt cgttcagtca gagagcataa tagaagtact gcgttttgat
                                                                      120
gatggagggc tactacagac cgagacaaca cttggactca gttcatatca gcagaaaagt
                                                                      180
atatetetet accgggggaa ttgcaggece atacgatttg agccaccaat getggattte
                                                                      240
catgaacaac cagttggaat gccaaaaatg gaaaaagtct acttacataa tcctagttct
                                                                      300
gaataaacga ttactttagt atcaatattt gctacaacat cacattttca tgcatcattt
                                                                      360
tttcaaaata ggaaaattct tccaggagga aatacatcat ttgatgtaag tttttccttg
                                                                      420
caagagtagt aggaaatgta gaaaatactt tatttattaa tacatctaat catggggtat
                                                                      480
```

ttacttaccc aggtatttgg tgttggagtt ccaaatccat atcgattgag gccgttcctt 540 ggggccagag tcactgtgaa tagcagtttc tcacctataa taaacatcca caatcctcac 600 agtgagcctt tacaggttgt agaaatgtac tctagtggag gagaccttca cctagaactc 660 ccaacgggtc aacaaggagg taccagaaaa ctgtgggaaa ttcctcctta tgaaaccaag 720 ggagtgatga gagccagttt ttcatctaga gaagcagata atcacacagc cttcataaga 780 ataaagacta atgcttcaga cagcacagag tttatcattc ttcctgttga ggttgaagtt 840 acaacagctc ctggaattta ttcctcaact gaaatgttag attttggtac actaagaaca 900 caagatctac caaaagtttt aaaccttcat ttattaaatt caggaacaaa agatgtacca 960 ataacaagtg ttcgacctac accacaaaaa tgatgctata acggtacact ttaaaccaat 1020 tacattaaaa gcatcaggaa agtaaataca ccaaggttgc aagcattagt tttgatgcat 1080 cgaaggcaaa aaagccatct cagttttctg ggaaaataac agttaaagca aaggaaaaga 1140 gttattctaa acttgaaata ccatatcaag cagaagtttt agatggttat ttgggatttg 1200 atcatgctgc aacattattt cacatccgag acagccctgc tgatcctgtg gaaaggccaa 1260 tttaccttac taacactttc agttttgcga tcctcattca cgatgtgttg ctaccagaag 1320 aagccaaaac aatgtttaaa gttcacaact tcagcaaacc agtcttaatt cttcctaatg 1380 aatcaggata catttttacc ctgcttttta tgccttccac atcatccatg cacattgata 1440 acaacatttt acttattacc aatgetteta aattteattt accegtgegg gtatacacag 1500 gctttttaga ttactttgta ttgccccca aaatagagga acgtttcata gattttggag 1560 tactgagtgc tacagaagca agtaatattt tatttgcaat tataaacagc aatccaattg 1620 agttggctat aaaaagttgg catatcatag gagacggttg tatcaataga acttgtagct 1680 gtggacagag gcaatagaac tacaataatt tcaagcctgc cagagtgtga aaaatcctct 1740 tcatcagatc aatcatcggt aacattagct tcaggctatt tttgcagtct tcagagtcaa 1800 acttactgca aaaaaattag gaggggattc atgatggagc catccagatc acaacagact 1860 atgagateet gacaateeet gtgaaagget gtgattgeag taggeteaet gacetgetee 1920 cctaagcacg tggttcttcc accttccttt ccagggaaaa tagttcatca aagtttaaat 1980 attatgaatt ccttctcaca gaaggtaaaa atacagcaaa tacgatcttt gtcagaagat 2040 gtgcgatttt actataaacg attacggggc aataaggaag acttggagcc aggaaaaaa 2100 tcaaagattg caaacattta ttttgatcct ggactacagt gtggggatca ttqctatqtt 2160 ggcttgcctt ttctatccaa atctgaaccc aaagtgcagc ctggtgtagc catgcaggaa 2220 gatatgtggg atgctgactg ggatttgcat caaagcctgt tcaagggatg gacaggaata 2280 aaggaaaatt caggtcatag attgagtgct atatttgaag taaatacaga ccttcaaaaa 2340 aatataatat caaaaatcac tgctgagctc tcctggcctt ccatacttag ctcacccgg 2400 cacttgaaat ttccacttac taatacaaac tgctcctcag gaagaagaga ttactttaga 2460 aaatccttgc aggatgttcc tgtctatgtt cagtttattc ctctggcttt atattccaac 2520 ccttcagtgt ttgtagataa gttagtatca aggtttaact tgagtaaggt ggcaaagata 2580 gatttgagaa cactagaatt tcaagtcttc agaaacagtg ctcatccact gcagagttca 2640 acaggattta tggagggccc tctctccaca tttaatttta aacctaattt taaaacctgg 2700 agaaaagaaa tctgtcaaag taaaagttta ctccagttca caacagaact gtttcttcac 2760 ttatcatagt cagaaataac ctgactgtga tggatgctgt gatggtccaa ggacaaggaa 2820 caactgagaa cttgagggtg gcaggcaagc ttccaggtcc aggaagctcc ttacgcttta 2880 aaatcacgga agcattgtta aaagattgta cagatagttt aaaactaaga gaaccaaatt 2940 tcacattgaa aagaacattt aaggtagaga atacaggaca acttcaaatt cacatagaaa 3000 ccattgaaat cagtggatac tcatgtgaag gatatggctt taaagttgtt aattgtcaag 3060 agtttactct aagtgccaat gcttctagag atataatcat attgtttact cctgatttta 3120 cagcttctag agttattcgg gaactgaagt ttataacaac cagtggctct gagtttgtat 3180 ttatattgaa tgcatccctt ccttaccata tgttagcaac ctgtgcagaa gccctaccca 3240 gacctaactg ggaactggct ctgtatatca tcatctcagg aataatgagt gcactgtttc 3300 ttttggtcat tggaacagcc ctatttggaa gctcaaggaa tatgggagcc catttcgaag 3360 geggetatee etttgaggee tegaaceege eettegatgt gggaaggeea tttgatetea 3420 ggagaatcgt tggtatttca tctgaaggaa acttgaacac actcagctgt gaccccggtc 3480 acagtagggg gttctgtgga gcaggcggat catcatcccg acccagtgcc gggagtcata 3540 agcagtgagg cccatcgggt cacccacaca gcagccacag caatagaaac tcagctgacg 3600 tggatgacgt cagagcctat aacagtggac gaacctctag catgacttct gctcaagcag 3660 cttcttcaca gcctgctaac aaaacacgcc cccttgtctt agattccaac acaggggctc 3720 aaggtcattc tgcgggcaga aagtccaaag gggcaaagca gagccagcac ggcagccagc 3780 accatgeeca cageeegetg gageageace eteageetee tetgeeaceg ecagtgeete 3840 agccccagga gccgcagcct gaaaggctgt ctcccgcccc cctcgcacac ccttcccacc 3900

```
cagaacgtgc cagcagcgcg aggcacagtt ccgaggactc ggacatcacc agtctcatag
                                                                   3960
aagccatgga caaagacttc gaccaccatg actccccagc cctagaagtg tttacagagc
                                                                   4020
4080
aaccacctaa gaagcaagag gaaaaggaga agaagggaaa gggaaagcca caggaagatg
                                                                   4140
agetgaagga etetttgget gatgatgata geteeteeae caccacagag acetecaace
                                                                   4200
ctgacacaga accgctcctc aaggaggata cagaaaagca aaagggaaaa caagccatgc
                                                                   4260
ctgaaaaaca tgaaagtgaa atgtctcaag tgaagcaaaa aagcaaaaaa ctcttaaata
                                                                   4320
ttaaqaaaga aatcccaaca gatgtgaaac ccagttcatt agaactacca tatactcccc
                                                                   4380
ctttggaaag taagcaacgt agaaatctcc caagcaagat tcctcttcca actgcaatga
                                                                   4440
caagtggatc caaatcacga aatgcccaga aaacaaaagg tacaagtaag ttagtggata
                                                                   4500
acagaccacc tgccctagca aaattcctcc cgaatagtca agaattaggc aacaccagta
                                                                   4560
gctcagaggg tgaaaaagac tctcctccac cggagtggga ttccgttcca gttcacaaac
                                                                   4620
ctggcagctc tactgatagt ctttataaac tttctctgca aaccctcaac gcagacattt
                                                                   4680
tettaaaaca aegeeagaee teacegaeae etgetteeee gteteeeea getgeeeeet
                                                                   4740
gcccctttgt ggcccggggc agctacagca gcatcgtcaa cagcagctcc agcagtgacc
                                                                   4800
ctaaaataaa acagccaaat ggaagcaaac acaagttgac aaaggcagcc tcgctcccgg
                                                                   4860
gcaagaacgg caaccccact tttgctgcag tcacggctgg ctacgacaag agcccaggtg
                                                                   4920
ggaatggctt tgctaaagtt tcttcaaaca aaacaggttt ctccagcagc cttggcattt
                                                                   4980
cacacgetee tgttgacage gatggeteag acageteggg tttgtggagt eceqteagea
                                                                   5040
acccaagcag ccctgacttc actcccctca attcgttctc cgcctttgga aactctttta
                                                                   5100
atctaactgg tgaagttttc agcaaactcg gattatctcg atcqtqcaat caqqcctcac
                                                                   5160
agaggagctg gaacgagttt aatagtggcc cttcatacct ttqqqaqtcq ccaqcqacaq
                                                                   5220
atcccagtcc ttcctggcca gccagttccg gctccccgac ccacacagcc acatcggtcc
                                                                   5280
teggtaacac cageggeetg tggtecacca etceatteag cagetecatt tggtecagea
                                                                   5340
accttagcag egecettece tteaceacte cageaaacae getggeaage ateggeetea
                                                                   5400
tgggcacaga aaactcccct gctcctcacg ctccctccac ctccagtcca gctgacqact
                                                                   5460
tgggacagac ctacaacccg tggcggatat ggagccccac gattggaaga agaagctcgg
                                                                   5520
accettggte taattegeae ttteeteaeg agaattaaat taageaaaaa acaaacaaae
                                                                   5580
atagtgggcc ctcgtctaga tcatgatgtg ccagtttctg agacatcttt ttaagqctct
                                                                   5640
tactgcagct cccctccca ccctcctctt ctttqcaaaa caqacccaaq caqqqcaqqc
                                                                   5700
tcagaccact cgcttctttc agatctttct tgcaattatg ataacatgag atttgctgtt
                                                                   5760
gtgcttttag agaaaagtct ggactcagcc acaaactcta ataagacctg tacatctgag
                                                                   5820
aacctttccc gttactgcgt tttcaccacc tgtcttcccc atgctttatt tatctgtatg
                                                                   5880
aacacagatt tgacattaca gctaaggaaa taatttgagt tgattcagaa atcctggcat
                                                                   5940
gtgacaattt tgttaaatta ccaagtttgg tttttaataa tttctcaata ttatgcqcca
                                                                   6000
agatctaatt ttaaaactgt atgaggactt tgtgctgaaa atagagtatt tttttaaagt
                                                                   6060
aaggctgtct tqqtttaaaa qcaqattaca qaaatqtaaq tcaacttaaq aacagtqaat
                                                                   6120
gaatgtaaaa acattcagtt gagaccatat gcattttctg tgctgtttgt acttgaggta
                                                                   6180
tgtaacattt gtatacctga acttatttta aagatgaact gaaatgcaca tagccaagtc
                                                                   6240
ttgagataca agattgaatg tgtatttctt aaaaatacaa ctttgtgttg tactttgaaa
                                                                   6300
taaatgatgc ttttttcana aaaaaaaa
                                                                   6329
```

```
<210> 5585
<211> 1991
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (358)...(1133)

<223> similar to gi2911882 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5585
tccgggtttc tcatattggt caggctggtc ttgaactcct gacctcaggt gatctgccca
                                                                       60
cctcggcctc ccaaagtgtt gggattacag gcgtgagcta ccgcgcccgg cagggttgtt
                                                                      120
tcttaaaggt aaataagctc cctaaatttg tctgtaaatt ggaagtaact ccagtgaaaa
                                                                      180
tgccaacagg aattttttt tggcttgaca aactaaggct aaaattaata tagaaatgag
                                                                      240
catacaataa taggaacact atgaaaaaga agagtaatga gaggtgggac caagtctata
                                                                      300
agatattaaa gggtaagtct ctccggcccg gtttccctcg gtgtgctact gtgcgcgcga
                                                                      360
tccagcacca tggggaagcg ggacaatcgg gtggcctata tgaacccaat agcaatggcg
                                                                      420
agatcaaggg gtccaatcca gtcttcaggg ccaacaatac aggattatct gaatcgacca
                                                                      480
aggcctacct gggaagaagt aaaagagcaa ctagaaaagg aaaagaaagg ctccaaggct
                                                                      540
ttggctgaat ttgaagaaaa aatgaatgag aactggaaga aagaactgga aaaacacaga
                                                                      600
gagaaattgt taagtggaag tgagagctca tccaaaaaaa gacagagaaa gaaaaaagaa
                                                                      660
aagaagaaat cttggtaggt attcatcttc ttctttcatc aagctctgat tcttccagca
                                                                      720
gttcttctga ttctgaagat gaggataaga aacaaggaaa acggagaaag aaaaagaaga
                                                                      780
accepticaca taaatcttct gaaagctcca tetcagaaac tegaatcagac agtaaggata
                                                                      840
gtttaaaaaa gaaaaagaag tcaaaagatg gaactgagaa agaaaaggat attaaaggac
                                                                      900
tcagcaaaaa gagaaagatg tattctgaag ataaaccttt atcatctgag tccttqtcag
                                                                      960
aatcagagta tattgaggag gtgcgagcaa aaaagaagaa aagcagtgaa gaacgagaaa
                                                                     1020
aagcaacaga aaaaacaaaa aagaaaaaga agcataagaa acacagtaag aagaagaaaa
                                                                     1080
agaaggctgc tagttcaagt cctgactcac cataacatta agaaaaatca ggattccctt
                                                                     1140
ataaagaaag tgcaatgtct gaggaaattt caactgtgaa aactacaaca tatttactaa
                                                                     1200
aatgcatgaa ttttcttgtt tttggaatta ttcctggact attcagtagc cactcagatg
                                                                     1260
ccactgtgtg aaagggccat aaatgttgcc tqctqcttqa acatctattt ttttctcttc
                                                                     1320
cagtgcttga taactctggg agataataca ctgcagtcgt actagtggtt aagatatttg
                                                                     1380
ggaataaaat taatactttt gactagaagc gtctaaggat aaaccaacag aaattgaatc
                                                                     1440
tggatacatc tttaagatgt aatcagaaat gaccagatga ctctagttag aatttttgaa
                                                                     1500
ggagggatta cattaatatt tcaaaaccct tactctgtag ataagtgtat tttaattttt
                                                                     1560
tcccctcgta tactttatt tacctgggga aggagctttt agggttgggg ggtggtttgc
                                                                     1620
tatctcttta gctagcagaa tagtgtgcct ttgatcctca cacatcctgt attatggaca
                                                                     1680
cagtagccat gcttcacggg gaggtcagag ctggctacca gcagtcttgc cctttactga
                                                                     1740
gettagtgte atetttggat getgteatat getgetttga gtgaaccaga gaaacageca
                                                                     1800
tttgcagcat gagaaagccc caaaagctct gggatttacc tccactttag taataatgaa
                                                                     1860
tattttttag cattagaatg tgttatgtca tttgaattaa ttttgactac actttggctt
                                                                     1920
gggagaggaa ttattttaaa tagacattgg tactttttga acttgatagc taaagattct
                                                                     1980
aaaatgcatg t
                                                                     1991
```

```
<210> 5586
<211> 1029
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (154)...(967)
<223> similar to gi34203 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5586
ggaattcgtg ctggggggtt gcagaaagct gctcgccagc ttagttcagg caggtgctgt
                                                                       60
cagcgtccct tgttttggag gagccagcct gagccctacc cccgacgaag cgagtggagg
                                                                      120
cggcggttta actgacgttt tctttctgcc cagccgaaag gaaagaaggc caagggaaag
                                                                      180
aaggtggctc cggccccagc tgtcgtgaag aagcaggagg ctaagaaagt ggtgaatccc
                                                                      240
ctgtttgaga aaaggcctaa gaattttggc attggacagg acatccagcc caaaagagac
                                                                      300
ctcacccgct ttgtgaaatg gccccgctat atcaggttgc agcggcagag agccatcctc
                                                                      360
tataagcggc tgaaagtgcc tcctgcgatt aaccagttca cccaggccct ggaccgccaa
                                                                      420
acagctactc agctgcttaa gctggcccac aagtacagac cagagacaaa gcaagagaag
                                                                      480
aagcagagac tgttggcccg ggccgagaag aaggctgctg gcaaagggga cgtcccaacg
                                                                      540
aagagaccac ctgtccttcg agcaggagtt aacaccgtca ccaccttggt ggagaacaag
                                                                      600
aaagctcagc tggtggtgat tgcacacgac gtggatccca tcgagctggt tgtcttcttg
                                                                      660
cetggceetg tgtegtaaaa tggggggtee cettaettge attateaagg gaaaagggea
                                                                      720
agactgggga cgtctagtcc acaggaagac ctgcaccact ggtcgccttt cacacaggtg
                                                                      780
aaactcggaa gacaaaaggc gcttttgctt aagctggtgg aagctatcag gaccaattac
                                                                      840
aatgacagat acagatacga tgagatccac tgtcactggg gcagcaacgt cctgggtcct
                                                                      900
aagtccgtgg ctcgtatcgc caagctcgaa aaggcaaagg ctaaagaact tgccactaaa
                                                                      960
ctgggttaaa tgtacactgt tgagttttct gtacataaaa ataattqaaa taatacaaat
                                                                     1020
tttccttca
                                                                     1029
     <210> 5587
     <211> 341
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (15)...(123)
    <223> similar to gi28547 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5587
ggcacgagcc caccatggcg ctgtgtcctg ccgacaagac caacgtcgta ggccgactgg
                                                                       60
ggtaaggtag ttgcgcacgc tggcgaggat ggtgcggagg ccctggacag gatgttactg
                                                                      120
ctcttcccca acaccaggac ctacttcccg cacttcgacc tgagtcacgg ctctgcccag
                                                                      180
ggtaagggtc acggatggaa tgagggcgac gcgctqacca acgccqtqtt qcacqaggac
                                                                      240
tacgtgccca acgcgctgta cgacctgagc gacctgcact cgcatcatgc ttcaggagga
                                                                      300
ccaggacate tteaagegae tactgeactg actgetggeg a
                                                                      341
     <210> 5588
    <211> 1911
    <212> DNA
    <213> Homo sapiens
    <220>
```

<221> misc feature

<222> (1609)...(641) <223> similar to gi5225320 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5588
ctttttttt ttgttagttg tttttgttt taatttgtct ccaataagca atgtcttctg
                                                                       60
ccccatccag catgggaagt gggtcccacg tgaagggggc cccaccaccc cactttqqqa
                                                                     120
agctgaaggc tagagacttc gggagccccc cccggctcaa gactcccccc tacgctgggt
                                                                     180
tgtgggttat attcagaggc ccgacaccca cactggggta ggttaggtat tgggtttact
                                                                     240
taggccacag gcccccggg ggcagggaga cagaqtqqqq qqcccqaaqc tccctqtctc
                                                                      300
tggaagaagt taaaaagttc ttggggtagg ccctgggccc cgtggggggc agttatgaga
                                                                     360
tgaagggagg ttactcctta agcccaggag tggttaagag acagtggggc tggtagagat
                                                                     420
gcctgtttaa agccttggcc tctaggaggt gttagagatt tgctggggtt gggggcccag
                                                                     480
ggttgctggg acccccagtt tttggggaag ggagctgtaa gagattgggg gatgttctga
                                                                     540
gctccccaga caagaactgc tggttaagag ggggccaggc ccqqttqqqq ctcaqctqtc
                                                                     600
cctgaggagc tcggcatccc gcctgggaga tgcagctgtc actggggttt ctccctctct
                                                                     660
gttgtcctgg cctcgtcctt ggcaggtggc ggggacttct tgggggaagc tgaagtgctg
                                                                     720
qqqttqggga cccccgccc cqactgggca tctatgctgg cgtqcctcct tgcggacaaq
                                                                     780
gtcctccagc tccttcttcc atccaaggag ctcagcaagg gccaggcagc cctggtcgca
                                                                     840
ttcacccagc caggccacgt ccctgcaagg aggtacccat gaccaggagg aggtccacct
                                                                     900
tcaggaagtc tgactgcata caggagaaga aacgcgctgg gaggctctca ccaaaaaaga
                                                                     960
cgattatcag gcttcaccag gctctgacag tcttcacact tgggcgtcac ctcagagaag
                                                                    1020
atcttctctt tcatccagct tagcgggtat tcgtgccggc agctggcgct gacgcagtgt
                                                                    1080
gatgtgtaga aggtgccgtg cgcctccaac aaagtcctcc tgttccaqcc cqqctattcq
                                                                    1140
ctccagggta tctatgttcc tgcgtgtagc agcgcaggag tagccccttg tccttcagca
                                                                    1200
ggcgcatgaa gtagtgacag atggttggct tgaactgccc caggatagag ttccttggcg
                                                                    1260
agggcgaaga agggttccgg atgtttcttg aaatagctga atctcaaaag atggcctctg
                                                                    1320
ggttagggaa agatggtcac ttctctaggt tgttcaataa gaggccggtg gatggagaag
                                                                    1380
cgaaaagtcg gggatgcctg cggatgtgga gattccagct cccaccaaac agatgactct
                                                                    1440
gcgacagcgt tcgctctgca tgtaccgggc caccccttcc aaggtcagct cgtccagcag
                                                                    1500
acgeteette tggetgeeca ggetgagegt etgggagaat aagtteegea ggaagteeat
                                                                    1560
gtctgcttct ccaccagcgg ctcctccctc agagtctgaa tctgagtcct ggaaggggtg
                                                                    1620
gggtggagtg gccaggcccg agaggtggga ttagggaggg aggagagggg gtgataccag
                                                                    1680
gtttggggaa aaggctgtgg caggaaggtg gcctgaggaa gtgcggggtg gtggagagac
                                                                    1740
tgcactgggg ctagctccag ggctctggga caggctgccg gggttggagt cctggccatg
                                                                    1800
cccgtcccca ggagcaagac ctcatgtgag tggctttgct ttgcttttct tttttqaqac
                                                                    1860
agtgtctcgc tctgttgccc aggctggagt gcactggtgc agtcacagct t
                                                                    1911
```

```
<210> 5589

<211> 1612

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(1613)

<223> n = a,t,c or g

<220>

<221> misc feature
```

<222> (109)...(1060) <223> similar to gi4929649 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5589 aggaggcggg cgggcgcggt tctttccgga aggattgaat ctcctttagc cccgcccqcc 60 tccgtagctg cctgaagtag tgcagggtca gcccgcaagt tgcaggtcat ggcgctggct 120 gctcgactgt ggcgccttct gcctttccga cgtggagccg ccccggggtc tcgtctccct 180 gcggggactt cgggcagccg cgggcattgc ggcccctgtc gattccgcgg cttcgaggta 240 atgggaaacc caggaacttt caacagaggc cttttactct cagctttgtc gtatttggt 300 tttgaaactt accaggttat ctctcaggct gctgtggttc atgccacagc caaagttgaa 360 gaaatacttg aacaagcaga ctacctgtat gaaagcggag aaacagaaaa actttatcag 420 ttgctaaccc aatacaagga aagtgaagat gcagagttac tgtggcgttt ggcacgggca 480 tcacgtgatg tagctcagct tagcagaacc tcagaagagg agaaaaagct attggtgtat 540 gaagccctag agtatgcaaa aagagcacta gaaaaatgaa tcaagttttg catctcataa 600 gtggtatgca atctgcctta gtgatgttgg agattatgaa ggcatcaagg ctaaaattgc 660 aaatgcatat atcatcaagg agcattttga gaaagcaatt gaactgaacc ctaaagatgc 720 tacttcaatt caccttatgg gtatttggtg ctatacattt gccgaaatgc cttggtatca 780 aagaagaatt gootaaaatg cotgtttgca actooctooc tagttoccac cotatgagaa 840 ggccttaggc taactttcac agggcagaac aagtggatcc aaacttctac agcaaaaact 900 tacttctttt aggaaagaca tacttgaaac tacacaacaa aaagcttgct gctttctggc 960 taatgaaagc caaggactat ccagcacaca cagaggagga taaacagata cagacagaag 1020 ctgctcagtt gcttacaagt ttcagtgaga agaattgaga acttttcaga gaagatttat 1080 gaaatagcta ataaacattg ccttttcttt taattctaaa cttaatatat gaactataac 1140 tgttctacgg ctttttaaat gttgtgacca tttaaccgtg taaatataaa atattctagg 1200 cttcttcaca aataataggg taaaataaat aatcgccata agagtggtag aaataaatct 1260 ccatggctca ggcaaagaga ttattttgca tcctggatac cagcaatgca aaatggtatg 1320 agatttctaa ggattgatca cattgggatg ggagatcaag caaagaaata tttgtagagg 1380 aggggaaatg gatctatagg ggatatacag ggggatggat tttcaaattg gattgattct 1440 aagttgaaat cttgaagaga aggtgtggtg acagtggtta ggatgttgtg ggttcctgac 1500 ataaagtagt taaatgatat atcttggagc taacctgtga aataaaaaac taagtaagga 1560 gatgatgtat tgcgnccgct ctagagtatt caacctaaca aagagtgact tt 1612

```
<210> 5590
<211> 2065
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2038)...(179)

<223> similar to gi535012 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5590
tttttcagag acaaggcttt tattcactgt atgccttggc atctcctctc acaccagaaa 60
gtttaaaaga aaaaacacag cgacaaggat tcacttgggc catttttggaa cccatttata 120
```

```
ttgtgggtgt tactctgggc ttcatctagc cccatactag cctctgagac tgcctcagac
                                                                      180
cgtctgaaca ttcatggcct tcccttgggc ccaaatgtag ctgtcccagt gtaaaaggag
                                                                      240
tcatagtctg gagtgtaaga cccagggatc ttacaaaaag cctccttggt ccttaggctc
                                                                      300
tgggtagtag gaaaaccagg ttgtgtttgt acccctagtc aaaaactttg atggcaattc
                                                                      360
tcaaaaacac gtttcggatg ggtgctgagt ggtggggtag agtctcccct gggacagatg
                                                                      420
ctgctcagag acttcctggg gcaatttggc tctgctgtca gggaggaaga tctcatctgg
                                                                      480
ggatgtgccc gggatccccg ccgggcgaat ggactcccag ttgccacccc cggggaacac
                                                                      540
gttaagcatt gtttcccctg cccccaggaa tgaaggtctt gcccatctcc caaatcaaca
                                                                      600
ctccttaaaa aggacttcca actggcaaaa aatcccctcg gcccctcggt gacccggtag
                                                                      660
cacttctcaa gccgtgcact cggccttgct ggtggggttg ctcagggcaa agatgatagg
                                                                      720
ggcgctcgtg gaaggaggcc atgtccctca gaatctgctc cgtgaagggc ttctgcqatg
                                                                      780
gcagcaacac ctatgatggc tgtgggcttc accagcctca ccacctcctc cagggagttg
                                                                      840
acttcaggat gggtcttggg caaacatctc cttttcatgg ttcaggtggt ctctcccctg
                                                                      900
aacaatqaqc cctttaaaaq tccaccatcc cagatctttc ttgtggcctc ctgccttcgg
                                                                      960
tacaccttct ttcctctagg gccatgacaa ggaggtgggc aatgccccat agctgcctcg
                                                                     1020
cctgcacctt ggaaaccaaa cacgtgattg gaaagcttgt tcttqqtqat tcqcaqaqca
                                                                     1080
gccaagatcc ctgccacagc aacggaggct gtgccttgga tgtcatcatt gaacatgcag
                                                                     1140
tacttgttac ggtatttgtt gagcaggcgg aaggcattgg cattggcgaa gtcttcaaat
                                                                     1200
tggatgaggc aatttattcc aaacttgtct gtcacagcct gcatgaactc atccagcaag
                                                                     1260
tcatcgtatg ccttcccgtg cacgcgctgg tgtttcaggc cgatgtacag agggtctctg
                                                                     1320
agcageteet cattgttggt geegaegtee ageageaeag ggaggeaetg etgegggtte
                                                                     1380
acccctccgc atgccgtgta cagggccagc ttgcccacag ggatgcccat gccgtagcag
                                                                     1440
cccaggtctc ccaggcccag gatgcgctcc ccatcagtca ccaccacggc cttaatattg
                                                                     1500
tcttctggcc aagaattcag cattgttgca agatgacctt tgtcatgaat ggtgatgaac
                                                                     1560
agtccacggg gcctgcggaa agtcaggcca tagtgctgac aggctagccc cacggtaggc
                                                                     1620
gtgtacacga ttggcatgaa cttctccacg tccgaagtca gcactcggta gaagagcttc
                                                                     1680
tcgttacggt cttggagtgt catgagaatg atgtacttgt ccaggtcact ctgctgccgc
                                                                     1740
tegtaatate teatgatteg gaggagetgg aegteetgge teagaaagea gggegggatt
                                                                     1800
aggccgtgga ttccaagctg cagcctttct tcaagggtaa aggccatccc cttgttgaga
                                                                     1860
tgagggttcc tggtgacatc gtatccgcgc ttcttcaggg gcacagggcg cgccgggcca
                                                                     1920
ggcttggagt ggcagccttg ggcgggcgcg gtgggtgtcc agcgcgggag ggcgccgcag
                                                                     1980
gcccggcccg gccagggagc cagccgcgtg cctgtcccca gcgcggcacc catggtcctt
                                                                     2040
ggcagacctc ggtcctctcc ttccg
                                                                     2065
```

```
<210> 5591
<211> 1126
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (194)...(916)
<223> similar to gi2477514 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5591

ggcacgagcc acggtccagg ctggacacaa ccaaaggcgg aggacccgtg gcccacgaag 60
ctcatctttg aactgtcccc gccttctccc gccttgactt gtgaccctag gccctttggg 120
gcgcctctga cccagctagc cagatcccgg acccaaacca tgttccctgt gaaggtgaaa 180
gtggagaaat cagagctgga gatggccaaa gcccggaacc aactggatgc tgtcttgcag 240
```

```
tgtctgctgg agaagagtca catggacagg gagcgtctgg atgaggaagc tgggaaaaca
                                                                      300
ccctcagaca cccacaataa ggactgctcc atcgcagcca ctggcaaaaag gccatctgcc
                                                                      360
cgcttccccc accagcggag gaagaagagg agggagatgg atgatgggct ggctgaggga
                                                                      420
gggccgcagc gatccaacac atatgtgatc aagctgttcg accqgagcgt ggacttggcc
                                                                      480
cagttcageg agaacaegee actgtaceea atetgeegeg cetggatgeg caacageeee
                                                                      540
tctgtgcgcg agcgtgaatg ctctcccagc tcacccctgc ccccgctgcc tgaggatgag
                                                                      600
gagggcttca gaggtaacca acagcaagag tcgttgatgt gtacaagctt gcccgccaac
                                                                      660
ccacaccccc gggggccaac cgaagaatgc ctgcagattc ccgcatccca tctccacttg
                                                                      720
cagcettgag gatgeaggge acceettgae ggtggagece ttttgagece gageetteae
                                                                      780
cctccacact catctatcgc aacatgcagc gctggaaacg catccgccag aggtggaagg
                                                                      840
aggcctctca tcggaaccag cttcgttact cagaaagcat gaagatccta cgagagatgt
                                                                      900
acgaacgaca gtgatgttcc caggtccccc cacaccagta aacatccccc agctccaaaa
                                                                      960
aaaaaaaaa ggggggccct tttaagggga ccaattttta ttcccggggg ttgggaaggt
                                                                     1020
aaaatttttt ttttggggcc ccaaaattaa attccggggc cgggttttta aaacggggg
                                                                     1080
gggggaaaaa cccgggggtt ccccaattta atccctttgg gaaaaa
                                                                     1126
```

```
<210> 5592
<211> 1964
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1741)...(1871)
<223> similar to gi5921397 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5592 tcatgggaag cctatttgca ggaattggtt ctgacttgga gaaaaaaac acaacttctt 60 gaaaaggtaa aatagcttaa agcatttaat atctaaacaa atcaatctgt taatagtagt 120 cacaaaatat gcttaatata gaaacccaca ttcatgtttt taagaaaaaa gtgtaaattg 180 tattccacct caaaacataa attaacccgc ttaaagaatc ttcagcggtc aaagtcatgg 240 tgaattttaa acaacttcag agtaaaataa caagtacttt atactgcttt atatctaaaa 300 aatgcttaca acttctcata aaaatagttt gaagcaacta tttttcttt tatttttaa 360 cagacacgtt caacattacg ggcaacattt ttaaaacctt aagctttaca gactttcaaa 420 cattcaaata ctggggtccc tttcctttga tgtggtttat tcagctagaa aaqaaaacat 480 ggtagacaac ttaatacatt ttcaccaaat ttgaaagtag tacaaaaatt ttaggactct 540 accgaactac acatcgtacc taatgtatca ttaaaaaatag aagacagtat tttcttcagc 600 aaataaaaca gcatactaat atgctgctaa tgcatacctt ttaatgtgta ctgtcattca 660 taaattattt acaactgcta ctgtgtgaag agaactagaa tgtaaatttt ctgcaaaact 720 ggaaaaaaag caatacaaaa tttgtgaaag cctgtgtttt atactataca aaagtcagtt 780 tttctcttca aataccagat attgtatgca gtgatatttt ggacacatta tagtaattct 840 tgaggatgtt ttagtgctgg aggtaagttt acaggcctcg attcttcatc aaggagtact 900 agatetteta tttcactgcc tetgtatttc ettttacata tttttaccac cacettttc 960 ttgagaaata acttcaatgc ttctcttgat gcaactgctt ttgcattttc tttgcttttt 1020 ccacagccag tgcccaaata cacagacttg cacctcaatt cacaaacaat actttcttga 1080 gagctcttat tttgaggcag atctgccaat tcttttagtg ggacaaaaaa tacatccagt 1140 gttgctttca gagcctcaat agctgcattt aggagctctc catgattcac attgggacta 1200 aagccaccaa cagctaccaa cttccatgcc accgttttat atagtctatt gaaaaaaggt 1260 tgcttctgtt tcacatcttc attggttaac ttgcaagaga atttgacaga actctcactt 1320

```
gactgtgaag tacttttaga aggcaactgt gaggtgctag tctgagaact actcttagaa
                                                                     1380
gccaactggg acacacttgc taaggaagtg cttttggaaa ccagagatcc actggtctgg
                                                                     1440
gagctgctct tggaagctag tagtgatgca gctacctggg aagtgctctt ggaagttagc
                                                                     1500
agcgatgtat ttgttgaaga gctgctcttg ggagtcagta aggatgtgcc tgatgaggaa
                                                                     1560
ctgtttttag caactgatga tgaaacactt gcctctgaac tagttttgga agttaaccca
                                                                     1620
cttgaagctg tctctgaact aggtttggaa gacaatagtg gcaattctac ctctgagctt
                                                                     1680
cctgaggagc ccaacaaggg cacctcgatc tctgagctgc tttgagaagc tgaggctgaa
                                                                     1740
gageetteea aageaetett tttaggtgat eeaetttgtt gtetagaate agtqqattqq
                                                                     1800
gtcatgtgac tattcacact ggatttcagc aaggaaacaa atgatgcaga accgtgttta
                                                                     1860
tctggagctt ctgcttcaga agctttccca gatcctgccg ttgttacctg agaggaaacg
                                                                     1920
ctgctgctgc tttggctgga aacagatcga tctctgtgcc gaat
                                                                     1964
```

```
<210> 5593
<211> 5276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (644)...(4326)
<223> similar to gi4589640 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5593 tttcgtggtt gttgtagtaa ccggggaagc agccgtcggc ggctgccctg agccttcctg 60 gggaaggagg agggaggtag gcgcagagcg cggtccacgc ctgctcgccc cgaaccatgg 120 gaagatgaga caggtaaacg cctgcgcccg cgcgcttccc taccctaggg aggagcattc 180 ccgggtccgg gctggcgcct gcagcaggac ttcccgctca gagcccgqqa qtaqctqttq 240 gcttccgggc gcgccgcgtt gaatcgcggc tgcggggtcg tcccgtcctt cccgggggga 300 gcatctgcgg acctacgtgg gattggggtt agctgggggt ggggctgaga agcaaattcc 360 tttcgggaga ggagtctcct tatgaatctg tgccatccaa attgcttgat ccagtgaatc 420 tgctaggaaa ggtctctgag gccccgtct gctgactgca tgacaaaccc taaaggaaat 480 gccaatcgtg atggcccggg acctggagga aacagcatca tcctcagagg atgaggaggt 540 cataagtcaa gaggatcatc catgcatcat gtggactgga ggctgcagga gaattccagt 600 tttggtattc catgccgacg ctattcttac aaaggacaac aatattagag taattggaga 660 acgttatcat ttgtcttata agattgtacg aacggacagt cgcctagtac gcagcattct 720 gacageceat ggattteatg aagtteaece aageageaet gaetataaee taatgtggae 780 aggatcccac ctgaagccct tcttactgcg caccctctct gaagcacaaa aagttaatca 840 ctttcccagg tcttatgaac ttacccggaa ggaccgactg tacaaaaaca ttattcqaat 900 gcagcataca catggattca aggettttca catectecce cagacettee teetgecage 960 tgagtacgcg gaattttgta attcatattc gaaggaccgg ggaccttgga tagtaaaacc 1020 agtggcatct tcaagggggc gggggggtct acctgatcaa caatccaaac cagatctccc 1080 tggaagagaa cattttggtc tcccgttaca ttaacaaccc cctgctcata qatqatttca 1140 agtttgacgt gcgcctctat gtgctcgtga cttcctatga tcctcttqtc atctatctct 1200 atgaagaagg attggctagg tttgcaactg tgcgatatga tcaaggagcc aagaacattc 1260 ggaaccagtt catgcatctg acaaactaca gtgtcaacaa gaaaagtgga gattacgtca 1320 gttgtgacga tccagaagtg gaggattatg gaaacaaatg gagcatgagt gctatgctta 1380 ggtacctgaa acaagaaggc agagatacaa ccgcattgat qqcccatqta qaaqacctga 1440 tcattaagac tataatctct gctgaactag ctattgctac tgcctgtaaa acctttgttc 1500 ctcatcgcag cagttgtttt gaactctatg gctttgacgt gctcatagat tctactctga 1560

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<210> 5594
<211> 3281
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (141)...(2294)
<223> similar to gi4469187 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5594 agcgggaatc gatagcatac tcagtgtcgt ggaattcgtg acttctgaca gctctctcca 60 tggaaggagg cggcggccgc gatgagcctt cagcctgccg ggcaggggac gtgaacatgg 120 atgaccctaa gaaggaagac attcttcttt tggccgatga aaaatttgac ttcgatcttt 180 cattgtcttc ttcgagtgca aatgaagatg atgaagtctt cttcggaccc tttggacata 240 aagaaagatg tattgctgcc agcttggaat taaataatcc ggttcccgaa cagcctccgt 300 tgcccacatc tgagagtccc tttgcctgga gccctctggc cggggagaag ttcgtggagg 360 tgtacaaaga ageteaetta etggetttae acattgagag eageageegg aaceaggeag 420 cccaagctgc caagcctgaa gaccctcgga gccagggcgt ggaaagattc atacaggagt 480 caaaatttta aaattaacct ctttgagaaa gaaaaggaaa tgaagaaaag ccccacgtct 540 cttaaaaggg agacatacta cctgtcagac agccccttgc tggggccccc tgtgggtgag 600 ceteggetet tggcetecte eceggecetg cecagetetg gtgcecagge ecgecteace 660 cgggcgccgg ggcctccgca ctctgctcat gctttgccca gggaatcatg cactgctcat 720 gctgcaagtc aggcagcgac tcagaggaag cccgggacca aattgctgct gcctcgagcg 780 gcctctgtta gaggaagagg catccctggg gctgcggaga agcccaagaa agagattcca 840 gctagtcctt ccaggacaaa aatcccagct gagaaggaat cccaccggga tgttctccct 900 gacaaacctg ccccgggtgc tgtcaatgtg ccggccgccg gaagccactt gggccagggc 960 aagcgggcga tccctgttcc caaacaagtt ggggctgaag aagaccctgt taaaagcacc 1020 cggctcttac agcaattctg caaaggaagt cctcctcggg ggcttgtttg gagcggggca 1080 tccagtgcgt gcactcccca accagtggcc aaagctaaat caagtgaatt tgcaagtatt 1140 cctgcaaatt agctcccgg cctctgtcca aacatcagca agtccaggca gaatgggacc 1200 egecatgetg eggecagete tggeetgeag gecetgtggg gtgeateete etggeaggee 1260 aagcgggtcg atgtttctga gctggcagcg gagcagctca cggcaccccc cctcagcatc 1320 ccccacccaa ccccagactc cggaaggtgg cggcccagtg gctgaactcc agttgcqctt 1380 ggtcagaatc ttctcaattg aataagacta gaagtatcag acggcgagat tcctgtctaa 1440 attccaagac aaaggttatg cctactccta caaatcaatt taaaattcct aagttttcta 1500 ttggtgactc cgccggacag ctcaacacca aagctttcgc gggcacagcg gccgcagtcg 1560 tgcacgtcag ttggcagggt cactgtccac agcaccccgg ttagacgctc atctgggcca 1620 gcaccacaaa gcctgctgag cgcatggcgt gtgtcagcct tqcccacacc cqccaqccgg 1680 cgctgctctg gccttccacc gatgaccccc aaaacgatgc ccagggccgt gggctctccc 1740 cttgtgtgtg ccagctcgga gacgttcctc tgagccccgc aagaactctg caatgagaac 1800 tgaaccaaca agggagagca acagaaagac agattccagg gctggtggat gtgtccctg 1860 acaggggttc tecteettee egtgtgeete aggeaettaa etttteteea gaggaaageg 1920

```
attctacttt ctccaaaagt actgccacag aagtagctcg ggaggaagcc aagccgggtg
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gagatgcagc ccctagtgag gctcttcttg tagatatcaa actggaacca ctcgcggtca
                                                                    2040
ctccagatgc tgcaagccag cccctcattg accttcctct catcgacttc tgcgataccc
                                                                    2100
cagaagcaca cgtggctgta ggatctgaaa gcaggcctct gatcgacctc atgacaaaca
                                                                    2160
ctccagacat gaataaaaat gtggccaaac cttcaccggt ggtgggacag ctcatagacc
                                                                    2220
tgagctcccc tctgatccag ctgagccctg aggctgacaa ggagaacgtg gattcccac
                                                                    2280
tcctcaagtt ctaagccgaa ccaaatcctt tgccttgaaa gaacagccct aaagtggttt
                                                                    2340
tcaaccctca gaaacaagct ttaggctggt cgcaqtqqct tacacttgta accctagaac
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ttgggaggct gaggtgggcg gattacttga gcccaggagt tcgggaccag cctgggaaat
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atagtgaaac tcctgtccct acaaaaata caaaaattag ccgggtgtgg tagtgcatgc
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ctgtagtccc agctacttgg gaggctgaag tgggaggatg gcctgagctc aaggagatgc
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aggctgcagt agggctgtga ttgtgccact gcactcaagc ctgggcacca atgtgagaac
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ctgtcttgga aaaaaaaaa aaagaaacat gttttagtag aagttttatt tgaaaaagaa
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aaataagcat aaatatattc ccagtgcctg ccgagggtcg cctgcagcga ctggggccac
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cacggaccac ccaaggcctc tgcttcccgc cgccaccctc ctcgctgcca ttctctgggc
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tggaatgtga agcctcagtc actctaaatg aagaattttc ttttgaatgt tttgtatgta
                                                                    2880
aaatagcaag tggctatttt taaagttaag tttgtataaa tagttagata ttctagattt
                                                                    2940
acattaaatt gtaaaataaa tggacttatt gaagcatatc ttgattttta agcttatctt
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gattttcaaa catgcatagc tatttttatc actctaatca gtaaggctac tatctagact
                                                                    3060
cgaatgcttt catacaagtg attttcaaaa attagtcaat aaaaattgat gtcagtgcag
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ggcccaggcc cgcccccaga tacactagtt tctaggtctg gggccagcct agtaattgtt
                                                                    3180
actaggcaca caggtgatgc tgactcgatg gcctgagaca caccccttga gaagaagctg
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                                                                    3281
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<210> 5595
<211> 6233
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5734)...(1911)

<223> similar to gi5305331 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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<400> 5595
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                                                                 120
gaatccaaag ataaactatg ttttacacaa tggacccttt tcccatagtt agtattaaat
                                                                 180
tttaaatatc tatttctttt gttaaaatga ttattttaca tactccccta aggtacatct
                                                                 240
ggcattacaa acataggctc agtaattctc aaaaactatc tgtttctagg agggcttgtt
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ggttaaaggg aaggcggcac aacccaaaaa agggggggaa ggccaaaaaa agttttaaat
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cggcacacaa taacctagca tatcaaatac atttattaaa agtagggaat tcccattgca
                                                                 420
atatcaaagg attcaaaggc agaaatacta acattacata taatgtacat ataatgtact
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gctacatgta gtgagattat ttttcaagct gaattgaaac cccccttat ataaagttta
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gcaacaaaca accatgtaga catgctgccc catttatcag ttaaaaaaaa aaaaatcaaa
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660
acaaaccatc tcaactagtg aatttttgca taataatgct gaacaaaaca cacattactg
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tgcttgcctg gctaagggca gtcaagctta gcccctctag tggaggacaa tggatgagca
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atcacaaaag caggctcaga atggccagaa ctgtttgaaa tggagttctt attcctgggg
                                                                 840
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ttaagaacgc agggccagga gaaggtagcc atgattcctc ctccctcatg ctcaccaact
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cacttcggat agtgatgaca ctcacaggag ggctgggagt atctggaatg atgatgggct
                                                                     5280
gatgctgatc ttggacaggg accaaggaat tataagaaga tgtggtgcgg aggggactgc
                                                                     5340
teceaaceag agaatagaet tgggaaggea gaacatetag agaggaettg gaagagaetg
                                                                     5400
gagctgactg ctttattcct cttcgaaggg agggaactgg attgttgttg tctgacaaca
                                                                     5460
tgggcaacac caacattcag aggctgagca gtggccaatg tcacatggtt agtcagcaag
                                                                     5520
gatggctgct gcatgatagt gctgtactgg ttgccatgag agtgggcatt cctccagtca
                                                                     5580
gctagctgct gtccactccc catggcctct ggaatcattg ctgtgggctg gacagaattg
                                                                     5640
tgtagagcta ccccaggcaa ctgttgccaa gttgaaggca ggagaatttg ctgagtccct
                                                                     5700
ccaggccacg cctgcagtac agcggcagtc tgttcaacca gcgccggccg gccggctgcg
                                                                     5760
cagctcagag taaagggcac cgcatactgc ggtgtgatgg tggctacttg agggtggaga
                                                                     5820
gttgctacca ttagtggtgt acagcttccc tgcgtgagaa ctcctgactg aatctgtagt
                                                                     5880
ggctgagcag ctggtgcctg gggtacaatc ggtacagcat tatccatcct cacagggaat
                                                                     5940
ccagaatgct ttgttgttgc ttgtagtcca gtttgaaacg caggtggaca tactataaat
                                                                     6000
gtctgttgga atggatctgt ctgagtgcaa atctgggtgg ttccaggctg caaggaaaca
                                                                     6060
ecctgctggg caactccagg aactggtgca gcagatgatg ggtacaaagc tgactggtag
                                                                     6120
tttagtagtg agacatctga attagccaga gaaagagtag cagctgctgc agtagaactg
                                                                     6180
gaagctagaa cactggctga ttgctatgtg gaaaatccaa aaggtgagtc att
                                                                     6233
```

```
<210> 5596

<211> 4321

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (232)...(3905)

<223> similar to gi1702924 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5596
agtcgacgat ttcgtcggcc gtggccgctc ggggcgcagc ggtagttttg tgtgtgta 60
cagcggggga cgcgctgc cggctcctgg gctggcgaca gattgtgcag gaatgcgagg 120
aatgcaccag gggcagagtc cacacagtcc gccgcggctg ccctagcgcc ttccctccc 180
agctctcgcc gcgcagccag aggtcaccgg agcatcttcg gagctggagg aatgccagct 240
```

cctgagcagg cctcattggt ggaggagggg caaccacaga cccgccagga agctgcctcc 300 actggcccag gcatggaacc cgagaccaca gccaccacta ttctagcatc cgtgaaggag 360 caggagette agttteageg acteaceega gaactggaag tggaaaggea gattgttgee 420 agtcagctag aaagatgtag gcttggagca gaatcaccaa gcatcgccag caccagctca 480 actgagaagt catttccttg gagatcaaca gacgtgccaa atactggtgt aagcaaacct 540 agagtttctg acgctgtcca gcccaacaac tatctcatca ggacagagcc agaacaagga 600 accetetatt caccagaaca gacatetete catgaaagtg agggateatt gggtaactea 660 agaagttcaa cacaaatgaa ttcttattcc gacagtggat accaggaagc agggagtttc 720 cacaacagcc agaacgtgag caaggcagac aacagacagc agcattcatt cataggatca 780 actaacaacc atgtggtgag gaattcaaga gctgaaggac aaacactggg tttcagccat 840 cagtagccaa tcgggccatg agaagagtta gttcagttcc atctagagca cagtctcctt 900 cttatgttat cagcacaggc gtgtctcctt caagggggtc tctgagaact tctctgggta 960 gaggatttgg ctctccgtca gtgaccgacc cccgacctct gaaccccagt gcatattcct 1020 ccaccacatt acctgctgca cgggcagcct ctccgtactc acagagaccc gcctccccaa 1080 cagctatacg gcggattggg tcagtcacct cccggcagac ctccaatccc aacggaccaa 1140 cccctcaata ccaaaccacc gccagagtgg ggtccccact gaccctgacg gatgcacaga 1200 ctcgagtagc ttccccatcc caaggccagg tggggtcgtc gtcccccaaa cgctcaggga 1260 tgaccgccgt accacagcat ctgggacctt cactgcaaag gactqttcat gacatggagc 1320 aattcggaca gcagcagtat gacatttatg agaggatggt tccacccagg ccagacagcc 1380 tgacaggett acggagttcc tatgctagtc agcatagtca gcttgggcaa gaccttcgtt 1440 ctgccgtgtc tcccgacttg cacattactc ctatatatga ggggaggacc tattacagcc 1500 cagtgtaccg cagcccaaac catggaactg tggagctcca aggatcgcag acggcgttgt 1560 atcgcacagg ttcagtaggt attggaaatc tacaaaggac atccagccaa cgaagtaccc 1620 ttacatacca aagaaataat tatgctctga acacaacagc tacctacgcg gagccctaca 1680 ggcctataca ataccgagtg caagagtgca attataacag gcttcagcat gcagtgccgg 1740 ctgatgatgg caccacaaga tccccatcaa tagacagcat tcagaaggac cccagggagt 1800 ttgcctggcg tgatcctgag ttgcctgagg tcattcacat gcttcagcac cagttcccat 1860 ctgttcaggc aaatgcagcg gcctacctgc agcacctgtg ctttggtgac aacaaagtga 1920 agatggaggt gtgtaggtta gggggaatca agcatctggt tgaccttctg gaccacagag 1980 ttttggaagt tcagaagaat gcttgtggtg cccttcgaaa cctcgttttt ggcaagtcta 2040 cagatgaaaa taaaatagca atgaagaatg ttggtgggga tacctgcctt gttgccgact 2100 gttgagaaaa atctatttga tgcagaagta agggagcttg ttacaggagt tctttggaat 2160 ttatcctcat gtgatgcctg taaaaaatga caatccattc cgaaaatgct ctcctcaacc 2220 cttaaacaaa aacactgtga ttggttcccc acattcctgg gaatggaaat aactccttcc 2280 ttttgatgga tgaatccata aaattaaatt ttcagacttc actagttcct gcgtaacacg 2340 gacaggttgc cctaaggaac ctcagctctg cgggggaaga agctcggaag caaatgcggt 2400 cctgcgaggg gctggtagac tcactgttgt atgtgatccc acacgtgtgt gaacacatcc 2460 gattacgaca gcaagacggg tggagaactg cgtgtgcacc ctgaggaacc tgtcctatcg 2520 gctggagctg gaggtgcccc aggcccggtt actgggactg aacgaattgg atgacttact 2580 aggaaaagag tctcccagca aagactctga gccaaagttg ctgggggaag aagaagaaaa 2640 agaaaaagag gactccgcaa gaagatcaat gggatggagt tggtcctatc ccaggactgt 2700 cgaagtcccc caaaggggtt gagatgctgt ggcacccatc ggtggtaaaa ccatatctga 2760 ctcttctagc agaaagttcc aacccagcca ccttggaagg ctctgcaggg tctctccaga 2820 acctctctgc tagcaactgg aagtttgcag catatatccc gggcggcccg tccgaaaaga 2880 aaaggggete eecateettg tggagettet gagaatggat aacegataga gttgtttett 2940 ccgtggcaac aagccttgag gaatatggca ctagatgttc gcaacaagga gctcataggc 3000 aaatacgcca tgcgagacct ggtcaaccgg ctccccggcg gcaatggccc cagtgtcttg 3060 tctgatgaga ccatggcagc catctgctgt gctctgcacg aggtcaccag caaaaacatg 3120 gagaacgcaa aagccctggc cgactcagga ggcatagaga agctggtgaa cataaccaaa 3180 ggcaggggcg acagatcatc tctgaaagtg gtgaaggcag cagcccaggt cttgaataca 3240 ttatggcaat atcgggacct ccggagcatt tataaaaagg atgggtggaa tcagaaccat 3300 tttattacac ctgtgtcgac attggagcga gaccgattca aatcacatcc ttccttgtct 3360 accaccaacc aacagatgtc acccatcatt cagtcagtcg gcagcacctc ttcctcacca 3420 gcactgttag gaatcagaga ccctcgctct gaatacgata ggacccagcc acctatgcag 3480 tattacaata gccaagggga tgccacacat aaaggcctgt accctggctc cagcaaacct 3540 tcaccaattt acatcagttc ctattcctca ccagcaagag aacaaaatag acggctacag 3600 catcaacage tgtattatag tcaagatgae tecaacagaa agaaetttga tgcatacaga 3660

<210> 5597

```
ttgtatttgc agtctcctca tagctatgaa gatccttatt ttgatgaccg agttcacttt
                                                                     3720
ccagcttcta ctgattactc aacacagtat ggactgaaat cgaccacaaa ttatgtagac
                                                                     3780
ttttattcca ctaaacgacc ttcttataga gcagaacagt acccagggtc cccagactca
                                                                     3840
tgggtgtacg atcaagatgc ccaacagagg aactctttct ttctaacctt gttcagattg
                                                                     3900
aggtgaaaag tccatcttgc tgatttcatg attgaaatgt gaaagtgaag tggaaggaat
                                                                     3960
gaatgaagtg tgttttttt ttttcttttt tgaggaatta tcagggaagt gaggaaatgt
                                                                     4020
ttqqqaqaqq actttctaag ctctatttag gtgttagatc taattactta tagattctgt
                                                                     4080
agtctggtga aggtgtgggt gacgtgatga gaggtttgag aaatgggtga aatgaaatgg
                                                                     4140
gggatatgta ggtcaaatca aattaaagat gattttttta atgtgaataa agttatgttc
                                                                     4200
tgataagttt gtacagaaaa aataaaatgg atgcccatgt tttattgcta ttactaaatg
                                                                     4260
tcaagattgt atgctattat gtcttgtaaa tttcttttgt tggtgtaaat atggaaatgc
                                                                     4320
                                                                     4321
```

```
<211> 2197
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (608)...(2180)
     <223> similar to gi3947613 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5597
tgtaatgtag ggggaggcgg gggaggcttc aaacatccgt gtcttcaaga ggcgcaggcg
                                                                    60
ggtgaattcg gactgtgact ctgtgttacc ctccaacttc ctcctggggg gcaatatctt
                                                                   120
tgatcccctg aacctgaata gcctcctgga tgaggaagtg agccgcactc tcaacgcgga
                                                                   180
gacccctaag tcatccccc ttccggccaa agggcgagat ccggtggaga tcctcatccc
                                                                   240
caaagatatt actgacccgc tcagtctcaa tacttgcact gatgagggcc atgtagttct
                                                                   300
tgcttcgcca ctcaagactg gtcggaagcg gcatagacac cggggacagc accaccagca
                                                                   360
gcagcaggca gccggaggga gtgagagtca ccccgtgccg cccacagccc ctctcacccc
                                                                   420
cttactccac ggggagggcg cctcacagca gccgcggcac aggggccaga accgggatgc
                                                                   480
cccccaaccc tatgaactca acacagccat caactgcagg gatgaagtgg tgtctcccct
                                                                   540
tocatotget etgeagggte ceteaggete cetateagee cetecagetg ceteagttat
                                                                   600
ctctgcaccc ccatcttcct cctcccgaca tcgcaaacgt cqcaqqactt ccaqcaagtc
                                                                   660
ggaggcaggg gctaggggtg gaggccaggg ttccaaggaa aagggccgag ggagttgggg
                                                                   720
aggccgccac caccaccacc acccactgcc tgcagcaggc ttcaaaaagc aacagcgcaa
                                                                   780
gttccagtat gggaattatt gcaaatacta tgggtaccgc aatccttcct gtgaggatgg
                                                                   840
gcgccttcgg gtgttgaagc ctgagtggtt tcggggccgg gacgtcctag atctgggctg
                                                                   900
caatgtgggc catctgaccc tgagcattgc ctgcaagtgg ggcccgtccc gcatggtggg
                                                                   960
cctggatatc gattcccggc tcatccattc tgcccgccaa aacatccgac actacctttc
                                                                  1020
cgaggagctg cgtctcccac cccagacttt ggaaggggac ccgggggcag agggtgagga
                                                                  1080
agggaccacc accettcgaa agaggagctg cttcccagcc tcgctgactg ccagccgggg
                                                                  1140
teccateget geceecaag tgecettgga tggageggae acateagtet tecceaacaa
                                                                  1200
tgttgtcttc gtcacgggta attatgtgct ggatcgagat gacctggtgg aggcccaaac
                                                                  1260
acctgagtat gatgtggtgc tctgcctcag cctcaccaag tgggtgcatc tgaactgggg
                                                                  1320
agacgagggc ctgaagcgca tgtttcgccg gatctaccgg cacctacgcc ctgggggcat
                                                                  1380
cctggtccta gagccccaac cctggtcgtc gtatggcaag agaaagactc ttacagaaac
                                                                  1440
1500
```

```
atccccagac gtgggcttct ccagctatga gcttgtggcc acaccccaca acacctctaa
                                                                    1560
aggettecag egteetgtgt acetgtteca caaggeeega teeeceagee actaagtgge
                                                                     1620
cccctaaaca gaaagtgtga agaggctgcc ctcgctgctc ataaggacct gggggaagag
                                                                     1680
gaaagtgtcc caaggtcttt cctttctgac tccaaaaata gtttcctttc ttggatctqc
                                                                     1740
aaagaaagct tttcttccgt cgctgcctca gcctcctccc tatqcctctq qcacctqcgc
                                                                    1800
agcaaggetg getgtgetgg agteaceate atetteetet cececageet cecaggetgg
                                                                    1860
atggcatgga ctgtttgctg acctctgttc tcttagggca tgggaggtgg gaggatatca
                                                                    1920
aattototag cootttooto otattotoco aaggagagag attoccattt otootoggoo
                                                                    1980
attgtaccta gctcttgtcc ctagctgcat ttcagtggac catggataga gggactgagg
                                                                    2040
gttagacggg gaagactggc agggaggcac gcaggtactg tgaaaatcct tccctttgcc
                                                                    2100
ctcccccagt qggagagggg gttgggtttt caatgtgaga acagcacaat aaacttgatg
                                                                    2160
tctagggcag tggccccac ccctgtcaaa aaaaaaa
                                                                    2197
```

```
<210> 5598
<211> 4378
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (230)...(4154)
<223> similar to gi1228045 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5598 gttcctgcag atagagtctg cctccctgc ccccttctct tctggattcc tcgctgccca 60 ccctcattct cccgggggaa gcctcgcaac gaagggccgg agccqccttt ctqctcccqq 120 aatgcttcac ctgtccgcag ctccgcccgc cccacccccg gaagtgacgg cgaccgcgcg 180 gccctgcctt tgttccgttg ggcgtcgcgg cgacggcggg aagatggcgg cggcgggagc 240 cctggaacgg agcttcgtgg agctaagcgg agctgagcgc gaaaggccga ggcactttcg 300 ggaattcaca gtctgcagca ttgggactgc aaatgccgtg gctggcgccg taaaatacag 360 tgaaagcgcg ggaggctttt actacgtgga gagtggcaag ttgttctccg taaccagaaa 420 caggttcatt cattggaaga cctctggaga tacattggag ctgatggagg agtcactgga 480 cataaatctg ttgaataatg ccattcgcct aaaattccaa aattgcagtg ttttacctgg 540 aggggtttat gtctctgaga ctcagaatcg tgtgataatc ttgatgttaa ccaatcaaac 600 agtgcacagg ttacttttac cacacccctc ccggatgtat aggagtgagt tggtagttga 660 cagtcagatg cagtcaatat tcactgacat tggaaaagtt gatttcacag atccttgcaa 720 ctatcagtta attccagcag tacctggaat atctcctaat tccaccgcct ctacagcctg 780 gctcagcagt gatggggagg ccctgtttgc cttaccatgt gcttctgggg gaatctttgt 840 tcttaagcta cctccttatg acatacctgg tatggtgtca gtcgtggaac tgaaacagag 900 ttcagtaatg caacgattgc ttacaggctg gatgccaaca gctatcaggg gtgaccagtc 960 qccttcaqat cqtcccctca gtcttgctgt tcattgtgtg gagcatgatg ccttcatctt 1020 tgctttgtgt caggatcata aactacgaat gtggtcttac aaggagcaaa tgtqcctaat 1080 ggtagctgac atgctggagt atgtccctgt gaagaaagac cttcggctta ctgctqqaac 1140 tggacacaaa ttacggcttg cttattcccc caccatggga ctctacctgg ggatattcaa 1200 tgcatgcacc aaaacgagga cagttctgca ttttccagtt ggtgagcact gagagtaatc 1260 gctatagtct cgatcatatt tcttcactgt tcacttctca ggagacactg attgactttg 1320 cettaaette caeggatate tgggeeetgt ggeatgatge tgagaaceaa acagtagtga 1380 aatacatcaa ctttgaacat aatgttgcag gtcagtggaa tccagttttt atgcagcctc 1440 tgccagagga agagattgtc atcagagatg atcaagaccc cagagagatg tatctqcaaa 1500

```
gtctttttac accaggacaa ttcacaaatg aagctttatg taaggcttta cagattttct
                                                                   1560
gccgaggaac tgagaggaat ttggatcttt cctggagtga actgaagaaa gaagttactt
                                                                   1620
tagctgttga aaatgagctt caaggaagtg taacagagta tqaattctcc caggaggagt
                                                                   1680
ttcgaaattt acaacaagaa ttctggtgca agttctatgc ctgttgtctt cagtatcaag
                                                                   1740
aagccctctc tcaccctctt gccctacatt tgaatccaca cacaaacatg gtgtgcctgc
                                                                   1800
tgaaaaaagg gtacctgtct ttccttattc cctcatcctt agtggatcat ttgtatctcc
                                                                   1860
tqccttatga gaaccttttg acagaagatg agacaaccat atctgatgat gtggatatcg
                                                                   1920
ctcgggatgt catatgtctt ataaaatgcc tccggctgat tgaaqaqtca qtaactqtqq
                                                                   1980
atatgtcagt tataatggaa atgagttgtt ataacctaca gtctccggaa aaggctgcag
                                                                   2040
agcagattct ggaagatatg atcactattg atgtagaaaa tgtgatggag gatatttgta
                                                                   2100
gtaaactgca agagattagg aacccaatcc atgcaattgg actacttata cgggaaatgg
                                                                   2160
attatgaaac agaagtggaa atggaaaagg gattcaatcc agctcagcct ttgaatattc
                                                                   2220
gaatgaatet tacceagete tatggtagta acacageagg gtatattgtg tgeagagggg
                                                                   2280
tgcataaaat cgccagtact cgtttcctga tctgcagaga tcttttgatc ttacagcagc
                                                                   2340
tgttaatgag gcttggagat gctgtgattt ggggaactgg tcagctcttt caagctcagc
                                                                   2400
2460
gtgagtgett ggcaactgat gttecaettg acaeactgga gtetaatete caacaettat
                                                                   2520
cagtactgga attaacagac tetggtgett taatggeaaa taggtttgta tetagteete
                                                                   2580
agactattgt ggagttattc ttccaagaag ttgcaagaaa acacattata tctcacctct
                                                                   2640
teteteagee aaaggeaeet etgageeaaa etggattgaa ttggeetgaa atgattaetg
                                                                   2700
caattaccag ttatttattg cagcttttat ggcctagcaa tcctggttgt ctctttctag
                                                                   2760
aatgtttgat gggaaattgc caatatgtac aattgcagga ttatattcaa ctgctacatc
                                                                   2820
cctggtgtca agtcaatgtt ggttcctgtc gatttatgct gggaaggtgt tacctagtta
                                                                   2880
caggagaagg acagaaggct ctggaatgtt tttgtcaggc agcatctgaa gtaggcaaag
                                                                   2940
aggaattett ggategettg attegeteag aggatgggga gategtgtet acceecagge
                                                                   3000
tgcagtatta tgacaaggtt ttacgactac tagatgtcat tggtttgcct gaactggtta
                                                                   3060
ttcagttggc tacatcagcc ataactgaag caagtgatga ctgggaaaag tcaggctact
                                                                   3120
cttaaggaca tgtatttca aacatcattt gggatttggg gtcacaatag ccaagcatat
                                                                   3180
ggaagccttt aaccccaaat tcctgattcc agcaggcaat tagattgttt acggcagttg
                                                                   3240
gtggtagttc tttgtgaacg ctcacagcta caggatcttg tagagttttc ctatgtgaat
                                                                   3300
ctgcataatg aggttgtggg aataattgag tcacgtgcta gagctgtgga ccttatgact
                                                                   3360
cacaattact atgaacttct gtatgccttt cacatctatc gccacaatta ccgcaaggct
                                                                   3420
ggcacagtga tgtttgagta tggaatgcgg cttggcagag aagttcgaac tctccgggga
                                                                   3480
cttgagaaac aaggcaactg ttatctggct gctctcaatt gtttacgact tattcgtcca
                                                                   3540
gaatatgcgt ggattgtgca gccagtgtct ggtgcagtgt atgatcgccc tggagcatcc
                                                                   3600
cctaagagga atcatgatgg agaatgcaca gctgcccca caaatcgaca aattgaaatc
                                                                   3660
ctggaactgg aagatctgga gaaagagtgt tccttggctc gcatccgcct cactttggct
                                                                   3720
cagcatgatc catcagcggt tgcagttgct ggaagttcat cagcagagga aatggtcact
                                                                   3780
ctcttggttc aggcgggcct ctttgacact gccatatcac tctgtcagac ttttaagctt
                                                                   3840
cccttaacgc cagtctttga agggcttgcc ttcaaatgca tcaaattgca atttggagga
                                                                   3900
gaggcagcac aagcagaagc ctgggcctgg ctagcagcca atcaqctctc atctqtcatc
                                                                   3960
actactaagg agtctagtgc tacagatgaa gcatggcgac tattatccac ttacctggag
                                                                   4020
aggtacaaag tccagaataa cttgtatcac cactgtgtaa tcaacaagct cttgtctcat
                                                                   4080
ggagtgcctc tgcctaattg gcttataaac agttacaaga aggttgatgc tgctgaattg
                                                                   4140
cttcgcttat acttaaacta tgacctttta gacttaactc cctatcaggt gatcagaata
                                                                   4200
tgtggatgct gaattggtga aaagacatca ctacttatca atcgacgtac caatggccgc
                                                                   4260
tacagtccca gtgcagagac ttacgtactc ctctattgat caacttaacc aaactttggg
                                                                   4320
aaagaactgt gccatcagta cccacattcc actggcccaa aaaatccttt actttttt
                                                                   4378
```

<sup>&</sup>lt;210> 5599

<sup>&</sup>lt;211> 3925

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(3926)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (208)...(2552)
<223> similar to gi2769562 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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720

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<223> similar to gi3451166 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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<400> 5601 ggtaaaagcc agttactttt attataatga atgagaaata ctatgactgg agaagaggtt 60 tcacgtgact agattattct tggttcacac actatggtat caaaattaat tatggaaaaa 120 aaaacccaca ttggattacc cacattttta ttgagttttg actgatgata gggaaacatt 180 tacaaaggag taaatgttac gtaacttctc acggtatgta agttagaagc tgggcagcaa 240 acatggttac caagagtcgt ctagttcttc atgagaaaag cctgttaaac tttcgacttt 300 gtcactagga tggcagcggt gtccaacata ggggagcctt cttgggacca tctttttga 360 gctcttgtct gccggactcc tgggtcttgc tcctgctgga tgattttcaa tgtatttctc 420 taaaggattt tcactgtgag gcagatttgt gcttttattt cttgattact catttctaat 480 tcattttcca atttctaatt ccttttttat tttaatcttc agtggattct tcaatcatct 540 ttaccctttc ctgatacagt ttttctagtt ctcttcgttc cctttctaaa acttcttgta 600 ggttactctg ccttctttct tctctctgcc ttcgttcttt cacttgctgt tcccgtattt 660 tttcttcttc cttttgttct tcaatttgtt tctgatctac acttgggtgc tgatatgaga 720 ggggcacage agetgcagea gegtecacat gagacatate eeeggcagga gaaageeege 780 ccatttccaa ctgccttggc atgttccctg cagattcaaa agatgattca aactcctcat 840 tatccttaaa agctagcttg tccacatctg aaaattcact tttgtcttga agttcagttt 900 qtcttcqata aaqacccact ttctqctccg gaqggctgga gacaggaggg atggagaggc 960 tgtgcctaga ctcagtgggt gatggtaggg gcattctgtc aggacaagga ctgggggaag 1020 caatgtgtga tctgcccaga ccttccagat acatttcact ttcgaggctt ctttttgctt 1080 ttggaagggg tgtggaagag aggcgtctgg aggaagtgcc cccgcggagc ctcgaggctg 1140 cactgootgt cagtgottoc acgacgtoat tootttotto aagtgtgooc acttgaggot 1200 gctcagagac aactctgtcc tctccaaaaa tatgtctttc cggggaactg gaagtaatgt 1260 ttttgaaggc ttccagcaag tgcagagatg gtgggctctt tgctgctagt gggcttttgg 1320 cagagttttt aatgactctc cgatggtaac ttctgaaagc cttttccaag cgttcggcct 1380 cttgctgaag ctctttgacc cttgccttag tattggctac aaactcaagg tcagaatcag 1440 gggaactacc ctccacccat gcagttggat aatttgtgat ccttgatgca accatacgtg 1500 cctagaacgt tttcctgttt aaaaggattg ttcaagaaat ccccactta acctcaccca 1560 ttgccaaggc accacattgc ccatttaatt aatcccattg aacagaacga acggatcaca 1620 gactgccttt ggattgcagt acacttcatt ctcctagggc tgtctgagtt tgcttcagtt 1680 gcaattttaa atcggcaacc tgagtagtta aactctttac agaagctttg taacctagaa 1740 tctgggcctt cagctgtgca gaatgctcaa tttcgtcttg cagttgtttg tgcagagctt 1800 qcctqcaqct ttcgaactcc tcatgctcaa ccactatagc cttttcggct ttccgtagtt 1860 ctttctgaaa gactgcaagt tcaggagccg gctgagctag gcggtttagg agacgcaggt 1920 tttcatttct actctcttcc agttgttgtt taagtaattt attttgtgcc agaagctcca 1980 gtttctcttc ttttagtagt gaataatcac tcatctcttt aaccttttca ttcagcatat 2040 ggttttgttt tgttattgcc aaagactggg ctttgacaga ctctaattca agctcaagtt 2100 ctttcacacg atttacagat tgattgagtt cctccttttt tgaattaata gctatgagct 2160 cctcttgcaa atggaacagc tttttcttta ttcttccttt catcttcaat cagtcgatta 2220 gttctaatga tgtagtcatc cttcagttca agttgatact ttagaagttc attcttgagc 2280 tttcggtcat aggtctcctc aaaactcttt atattctgct cctgtctcct aagtgcctca 2340 gttatgcttt tatgtttttc ttcctggagc ttctggttca attcaaaagc ttcaactctt 2400 tgcttcagct ctgcttctct tcctcttagc aaatccatat cttttagtaa aagttgcctt 2460 tgagcataaa tttcttttgt ttcaatctct tggtgcttgt gaattctttc aagggtactc 2520 ttttcccgaa gaacgagagc ttcagatttt gcttgacaag ctttttcaaa atcattctgg 2580 aacatggtta acteetttte atactttttt tttgetteea ttttaatttt tgetateteg 2640 gtatctttaa aaaacttcaa cttttgacac atttctgccc gaagttgctc ttctatttct 2700

```
ctcttatact catttagctt tatttctaaa gattcgaact tgatacgctg agggtaagca
                                                                     2760
tctgcaaact gatcatcaat aagctgaagc ttctcagcca gagaatctct gttaaatgtc
                                                                     2820
gaacttgtct gagtttccat attacaactc tctttagctt gatgatattc tgccaattct
                                                                     2880
tttaaaaaaa tgcataagaa aacctttttg attttcttta tcagatcctg aaaccagtga
                                                                     2940
tttgtagaga ctggagtagg ggttgattta atgaagttgt aataagatcc tqcataggta
                                                                     3000
ataccttttc ttttgccaaa ccactttctg gaaagaaaac agaaagtgaa tattcatagc
                                                                     3060
cacatetttg taagtgatet gecactaaag agttagagge gectattaag agggagetee
                                                                     3120
cttctactga aatggaccga ggctgcagtt ctccactcaa tacagggtgc atcaactcat
                                                                     3180
gaattagctg gtttcgaagt tgtgtcttga gtgtatccag tataccccqa tccttaaacq
                                                                     3240
tetggtatag etttttgege agtteatett gaeteaacae ateageeacq gtaaacatgt
                                                                     3300
tggactgcgc catcatcagg cgtcagctcc ctccggagcc cgcctcgctc gccccgccgc
                                                                     3360
ggcccgagtt tagtgcccag cccgggcggt ggggccaaga cgagggggaa tccctgccct
                                                                     3420
cagaaccetg cetetgteec gagggttegg gaggaacaaa ggtgetgaac gttetetgee
                                                                     3480
tcgcactccc aactaggttt tctagcaaac acgcgagctt cctttcttcg cggttctgag
                                                                     3540
gcaagggcga ggacccaggc acgactcaaa ggcggctgga gggcggggac ccaqacacta
                                                                     3600
gggactgaag gcagcgaggc aggaccgcct cacagccagt ccggcaactt ccggaaacct
                                                                     3660
gctaaatata gccttcccga gctgaagaac tacggagcat gagcttggtt qcccaqcacc
                                                                     3720
ggccggaaac gaaa
                                                                     3734
```

```
<210> 5602

<211> 1038

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (51)...(308)

<223> similar to gi1890635 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5602 ggaagtcaca gctgctgagg gaccactctg ctcccccqcc taaqccatqc acctctqtqq 60 gagcaatggg ctgctgaccc agacagaccc caaggagcaa caaaggcagc tgaagaagca 120 gaagaaccgg gcagccgccc agcgaagccg gcagaagcac acagacaagg cagacgccct 180 gcaccagcag cacgagtete tggaaaaaga caacetegee etgeggaagg agatecagte 240 cctgcaggcc gagctggcgt ggtggagccg gaccctgcac gtgcatgagc gcctgtgccc 300 catggattgt gcctcctgct cagctccagg gctcctgggc tgctgggacc aggctgaggg 360 gctcctgggc cctggcccac agggacaaca tggctgccgg gagcagctgg agctgttcca 420 gaccccgggt tcctgttacc cagctcagcc gctctctcca ggtccacagc ctcatgattc 480 teccageete etecagtgee ecetgeeete aetgteeett ggeeeegetg tggttgetga 540 acctectgte cagetgteec ceagecetet cetgtttgee tegeacactg gttecageet 600 660 tecacagece etegagetgg ageateceae cagagggaag etggggteet etecegaeaa 720 ecetteetet geeetgggge ttgeaegtet geagageagg gageaeaaac etgetetete 780 agcagccact tggcaagggc tggttgtgga tcccagccct caccctctcc tggcctttcc 840 tetgetetee tetgeteaag tecaetteta acetggtett eggagetggg ttggeeecet 900 tttttgggct caggaagcag cettagcaca cgggccctct cetecetcaa taatqqqqqc 960 tgccctgcgt ggctgaccag ctggcccaag atttcacagt cgaaaaagga agccccact 1020 ggatgccttc ccactgtg 1038 <210> 5603 <211> 994

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (515)...(380)
     <223> similar to gi5104224 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5603
ttttttttt ttaaagttaa agattctttt attaataaat tctccctccc ctccaaactc
                                                                       60
tccccaaaat aaatatctcc tccccgcttt ggggagttgg gggggtctgt atcttagggc
                                                                      120
cagecetect agtgggeeag ecceetagtg ttaaaaatag gteectaace ecceagggtg
                                                                      180
acccccgtgg tggaatttca ggacatctga gtgagtgggg cctagtgtca agtctgcccc
                                                                      240
ccaagtcage ctggccccca gggcctctag gaaggagggc accccctcc cctgtgcaaa
                                                                      300
tgctgcagtt ccttagtcag tgtcagctgt tttgtgtgag ccagcgtgag gctccctttc
                                                                      360
tgttctggag ccagaggcag ggcaaccaga caccttggaa ggttcccctg aaccctqqqc
                                                                      420
ccaggcctca gaggtgattc accegecee caeeeeett gtggttggag gagettgget
                                                                      480
eccgcegcgt etgggaggea gagaetgget etagaatgga tgaatgaatg atgagtggge
                                                                      540
gagccccggc tggcaggggg cacattgtca ctggatcagc gccacagctg ggcagccctc
                                                                      600
teegeeggte teetetatgg gggtggtgaa ettetetete etgeggeate gteteeagae
                                                                      660
caaaaagcca gaaagcagcc ccagcacgaa ggtcaggctc agagcgcccc caaggatggg
                                                                      720
ccaaagcagc cggaaggggg caggaggtgc tgcagcgcag cccaggcaga agtcgctgtg
                                                                      780
eggtegegee etgeaagaeg egeagteeat geaettgtee aggteegege teeaggaget
                                                                      840
gccgcgggag cagggggggg tgcctggcgc ttgctccccg gccacggagc gcagcaacgc
                                                                      900
cagccagage eccageacga ggageegeag caaceggege agegageece gagecatagt
                                                                      960
gcacgtcctc tcgtgccgaa ttcctcagcg cgga
                                                                      994
     <210> 5604
     <211> 1671
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1543)...(429)
     <223> similar to gi189762 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5604
ttttttttta tttttttt tcatgttaga aattccttta ttccttatca aaacaaacta
                                                                       60
```

```
acaqtaaacg tatattatat gctttaattt tatacatata agttatcttg tttggataca
                                                                      120
tctttcatca ggactctgcc acatccatac tttgtccttg tggtgagaga ggataaaatg
                                                                      180
tgatataatt tgttattcaa agaacatggc aaccgtaaca gacaaaagga agcatggcat
                                                                      240
ctaggggagg agagtggaga gttttccata cacaaacaca tttaaacttc cctgtacaaa
                                                                      300
aatacctgct gttgctttag aaatcgtttt cctttatgaa tagtcaggtc ttgcagtaca
                                                                      360
aatccaggtg cagtgccagc aagtatttca aataaatttc aacgacttga tattcaagtc
                                                                      420
caaactaaat atttaatgtt ttctttattg caaatatgat gtctttgacc tgaggtatag
                                                                      480
agttgtcctc tagaatcttt gcataaggca tagggacatc agcaccagtg acacgaacag
                                                                      540
caggagcatc caggaaaatt gaacgcagga ccttcccatg atcctggcac agatttcaag
                                                                      600
etectactee caaactgtgg ceagestest teccacagtt acaagatgaa tittgtette
                                                                      660
atgacactgg gcttctatgg gtttccatgt ccattgggtc taatgggtac gcatatttat
                                                                      720
cacctcagca ttcgactcct tctttagata ggcactggct ggcaggcttc taaggcagtg
                                                                      780
ggcccacagg tcttgaatgg gaaaccacag ttatatgtgt tccgtqcatt tctattttgg
                                                                      840
cttttccaat aggaatcatg aaaatctttt gactgagctt ccggaggaaa ttcaaaaggg
                                                                      900
aaccccatac atcaattcat tctctagcgc caccactgga ttgttatccc gaatggctga
                                                                      960
tttaataagt cctttagcat cctacgaagt cctagggact gaccaccttt aagcctgggc
                                                                     1020
agtgcccata ccaggcagca aagcactgtg agtgctgggc agctacacct gctgaagcac
                                                                     1080
caattgggcc cccatgatac tataaqcaca ggctqaaqqc caaccaqaac atgtagtagg
                                                                     1140
tcttggcagc tgagtttata acctggtcaa atggcttgcc atggagaaat tgaaggtcca
                                                                     1200
taaattcaac aaaatgggcc gcaaacccca gccaatagct gcacctacaa gcaattccca
                                                                     1260
agcaaagccc atctctgata tgggagtgtc aaataatcct cttgtctcca tatttcttcc
                                                                     1320
acagccctcg actaaccttg tatgccccat catagctggg caacttcttc tccaagcaga
                                                                     1380
aataccttct catctcttc cagctcctca tccataccct gatttatagc atcacgaact
                                                                     1440
gtcaacctgc acggcagccg gcgcggtcca gtgaaagcgc ctcttcagca gcccagagac
                                                                     1500
ctcccgaagg ggtctccgca ccaagccaga caccgccgcc atcttggtcg tgtcctctat
                                                                     1560
ccgctgccaa acgaccccag aggggccggc agacgtgagc acgcccgcct ccaccggcqc
                                                                     1620
gggcaatggc aaggcgcgcc ggctgcgtga cccqcccacc cqcccaccqq t
                                                                     1671
     <210> 5605
     <211> 3670
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(3671)
    <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (197)...(2288)
     <223> similar to gi5834572 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5605
tttcgtggag aaacccggcc cccagaagat tgtgggtgta gtggccacag ccttacaggc
                                                                       60
aggcaggggt ggttggtgtc aacagggggg ccaacagggt accagagcca agaccctcgg
                                                                      120
```

180

240

300

cetectecce egeogeette etgeagatet gettggettt gaggaagagt ggeagtactg

cctcactgca taagggatgg gatcagagaa cagtgcttta aagagctata cactgagaga

accaccattt accttaccct ctggacttgc tgtttatccc gctgtactgc aagatggcaa

```
atttgcttca gtttttgtgt ataagagaga aaatgaagac aaggttaata aagctgccaa
                                                                      360
ggtaccataa tagcatttga agacacttcg tcacccttgc ttgctaagat ttttatcttg
                                                                      420
tactgtggaa gcggatggca ttcatcttgt cactgagcga gtacagcccc tqgaagtggc
                                                                      480
tttggaaaca ttgtcttctg cagaggtctg tgctgggatc tatgacatat tgctggctct
                                                                      540
tatcttcctt catgacagag gacacctaac acacaataat gtctgtttat catctgtgtt
                                                                      600
tgtgagtgaa gatggacact ggaagctagg aggaatggaa actgtttgta aagtttctca
                                                                      660
ggccacacca gagtttctga ggagtattca gtcaataaga gacccagcat ctatcctcc
                                                                      720
tgaagagatg tctccagaat tcacaactct cccagagtgt catggacatg cccqqqatqc
                                                                      780
cttttcattt ggaacattgg tggaaagttt gctcacaatc ttaaatgaac aggtttcagc
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ggatgttctc tccagctttc aacagacctt gcactcaact ttgctgaatc ccattccaaa
                                                                      900
atggcggcca gcgctctgca ccttactatc tcatgacttc ttcagaaatg attttctgga
                                                                      960
agttgtgaat ttcttgaaaa gtttaacatt gaagagtgaa gaggagaaaa cggaattctt
                                                                     1020
taaatttctg ctggacagag tcagctgctt gtcagaggaa ttgatagctt caaggttqqt
                                                                     1080
gcctcttctg cttaatcagt tggtgtttgc agagccagtg gctgtttaag agttttcttc
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cttatctgct tggccccaaa aaagatcatg cgcagggaga aactccttgc ttgctctcac
                                                                     1200
cagccctgtt ccagtcacgg gtgatccccg tgcttctcca gttgtttgaa gttcatgaag
                                                                     1260
agcatgtgcg gatggtgctg ctgtctcaca tcgaggccta cgtgggagca ctttcactca
                                                                     1320
gggagcagct gaagaaagtt catcttggcc acaqqtttta ctgqqqcctq cqtqatnact
                                                                     1380
agcgattcca ttgtggcaat tactctgcat agcctagcag tgctggtctc tctgcttqqa
                                                                     1440
ccagaggtgg ttgtgggagg agaacgaacc aagatettca aacgcactgc ccccaagttt
                                                                     1500
tactaaaaaa tactgacctt tctctagaag gcgatccatt ttctcagcct attaaatttc
                                                                     1560
ccataaatgg actctcagat gtaaaaaata cttcggagga cagtgaaaac ttcccatcaa
                                                                     1620
gttctaaaaa gtctgaggag tggcctgact ggagtggacc tgagggagcc tgaaaatcaa
                                                                     1680
actgtcaaca taccagattt ggccctagag aacctttgtg atgatgtcaa gtcccagtgc
                                                                     1740
actaccttgg atgtggaaga gtcatcttgg gatgactgcg agcccagcag cttagatact
                                                                     1800
aaagtaaacc caggaggtgg aatcactgct acaaaacctg ttacctcagg ggagcagaag
                                                                     1860
cctattcctg ctttgctttc actcactgaa gagtctatgc cttggaaatc aagcttaccc
                                                                     1920
caaaagatta gccttgtaca aaggggggat gacgcagacc aaatcgagcc gccaaaagtg
                                                                     1980
tcatcacaag aaaggcccct taaggttcca tcagaacttg gtttaggaga ggaattcacc
                                                                     2040
attcaagtaa aaaagaagcc agtaaaaagat cctgagatgg attggtttgc tgatatqatc
                                                                     2100
ccagaaatta agccttctgc tgcttttctt atattacctg aactgaggac agaaatggtc
                                                                     2160
ccaaaaaagg atgatgtctc cccagtgatg cagttttcct caaaatttgc tgcagcagaa
                                                                     2220
attactgagg gagaggctga aggctgggaa gaagaagggg agctgaactg ggaagataat
                                                                     2280
aactggtgac aatagatgtg agttaaactt taggaaaaag gattcccttt ttttaaaaaa
                                                                     2340
aatcaatacc tcaaaagcag gctttgggac aagaaaaccc caaagtggcc tgcttttccc
                                                                     2400
atcccaggag ctcattatcc agtctgtgcc aactgaagta ggagactgac tgtgagtgct
                                                                     2460
ggctaaaagc cctgggtggt gaggctcaca gtactggttt ccagggagga agagcctttg
                                                                     2520
tgcatttgac tgaggccagt ttctatggaa gagccaagta ggcttgaggg agagggtccg
                                                                     2580
aatttacctg cctttttccc cgggacaatt ccgggaagta aagaaaatgt aattccaagc
                                                                     2640
ctggttagcc ttaattttgt gcccattctt ttctttaaca taagagtaag ctctattatg
                                                                     2700
aaatacaact tttaaaaaat tttagcctat aaattatata aatgatttta aattgctgag
                                                                     2760
gtttccttag gcagcttatt tatttgttta cagttagact atctgagtaa atggttcttt
                                                                     2820
gtggacctag gcagttcctg actgttccac atgtagtaca ttgtaccaaa gttcttaata
                                                                     2880
agaatattcc ccacaatcct gttctctaaa tgtcaaataa agattatttt cactagattc
                                                                     2940
aactttacaa aatttgtttt atatctgtta gaaaatgtac agacataagt attttcagtt
                                                                     3000
gacaaagcat caaacccagt tctgcctagt gataagtttc accctagagt atgtatgtaa
                                                                     3060
egttttaget tatecateet ttettggage geeteeattt eeattgaaag eeaggetgga
                                                                     3120
gcaggaccct tttggagtag tgactcagtt gcttccaaag cccctgtcta ttgtatgcag
                                                                     3180
egetgaceat gtactettet teccaggggg aacteetgae gagetettat tgeataagge
                                                                     3240
tgtaaagatg acctctatgc ttcttctaca gtcacattag gcaaagggtt cccaggaaaa
                                                                     3300
tacctttttt cctgtttcac acgttccact ttgggcagct ttcagtttca tctacaaacc
                                                                     3360
cagtettete cagaaaggat acaaetttgt tettagttte tteagaactg agacaetgtg
                                                                     3420
gaactatete tteatgattt gtteeeteag egaactgagt aaaegeetee aaggtatgtt
                                                                     3480
gttctagcag ccaactcctg tcagctagca gtaaggcaaa catacaggac aggttgggca
                                                                     3540
gaattotgto otggatagot toaggtataa aaagttttoa taaagaagat acaaaatooa
                                                                     3600
acattgccta acgaacatag tcaggaagct ctaatttaag tagcgaggtc tgcaaagtta
                                                                     3660
cctcgtgccg
                                                                     3670
```

```
<210> 5606
<211> 1774
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1279)...(1756)
<223> similar to gi804764 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5606
agaaaccccc accccttctc cgtgtctcta ctcttttctc tgggcttgct ccttcactat
                                                                       60
gggcaagett ccacetteca tteetttett eteettage atgtattett cagaaettaa
                                                                      120
aatctcttca attctcacct gacctaaaat ctaagcatct tattttcttc tgcaatgctg
                                                                      180
cttgacccca atataaactc gacaggagtt ccaaatagcc agaaaatggc acattcaatt
                                                                      240
tttccatcct acaagatcta aataattctt gtcgtaaaat ggcaaatggt ctgaggtgcc
                                                                      300
tgaagtccag gcattctttt acacatcagt cccttcctag tctctgtgcc cagtgcaact
                                                                      360
cgtcccaaat cttccttctt tccctcccgc ctgtcccctc agtcccaacc ccaagcgtca
                                                                      420
ctgagtcttt ctaatcttcc ttttctacag acccatctga cctctcccct cctccctggg
                                                                      480
ctgctcctcg ccaggccgag ctaggtccca attcttcctc agcctctgct cctccaccct
                                                                      540
ataatccttt tatcacctcc cctcctcaca cctggtccgg tttacagttt cgttccgtga
                                                                      600
ctagecetee eccaectgee cageaattta etettaaaaa ggtggetgga gecaaaqqea
                                                                      660
tagtcaaggt taatgctcct ttttctttat cccaaatcag atagcgttta ggctcttttt
                                                                      720
catcaaatat aaaaatccag cccagttcat ggctcgtttg gcagcaaccc tgagacgctt
                                                                      780
tacagcccta gaccctaaaa ggtcaaaagg ccatcttatt ctcaatatac attttattac
                                                                      840
ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca
                                                                      900
caacaggatt taattaacct cgccttcaag gtgtacaata atagagtaga ggcagccaag
                                                                      960
tagcaatgta tttctgagtt gcaattcctt gcctccactg tgagacaaac cccagccaca
                                                                     1020
tetecageae acaagaaett ecaaaegeet gaaceaeagt tgeeaggggt teetecagaa
                                                                     1080
cttcctcccc caggaacttg ctacacatgc cggaaatctg gccactgggc caaggaatgc
                                                                     1140
ccgcagcccg ggattcctcc taaaccgtgt cccatctgtg tgggacccca ctggaaactg
                                                                     1200
gactgtccaa ctcacctggc agccactccc agagcccctg gaactctggc acaaggctct
                                                                     1260
ctgattgact cetteceaga tettettgge ttageggetg aagactgatg etgeeggate
                                                                     1320
gcctcggaag ccccgtagac catcacggat gccgagcttt aggtaactct cacggtggag
                                                                     1380
ggtaagtccg tccccttctt aatcaatacg gaggctaccc actccacatt accttctttt
                                                                     1440
caagggcctg tttcccttgc ctccataact gttgtaggta ttgacggcca ggcttctaaa
                                                                     1500
cctcttaaaa ctccccaacg tctggtgcca acattagaca atacgtcgtt ttaagcactc
                                                                     1560
ctttttagtt atccccatcg tgccaggttc ccttattagg ctgaggacac tttaactaaa
                                                                     1620
ttatctgctt ccctgactat tcctggacta cagctgtatc tcattgccac ccttcttccc
                                                                     1680
aatccaaagc ctcctttgtg tcctcctctt gtatacccca acttaaccca caagtataag
                                                                     1740
atatctctac tccctccttg acgaccgatt catg
                                                                     1774
```

<210> 5607 <211> 4178

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4135)...(1038)

<223> similar to gi4240251 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5607 ttttttttt ccgctcagat attttatttg tgtttgtctt tttcttttt tggtgggggg 60 aaggggacag gttggaaggg agacagaaaa acaaaatcaa agaggagaaa aaaaacatga 120 ctcttcccac cctccaccac ccctggcccc aggcctgagt caatgagggt gaggatgagc 180 acacacagcg ggcgaacagc aataacttag gggaggagcg ccaggagaac acagagtgac 240 tgctggactc cacagetgag gaggetgcct gtctagaggt ccgaagggct gggcctgggg 300 taagtgagca aactgaggaa ggtgggtgaa aagagaggac taggggactg gagaaacttc 360 actgagtcgt gggagataaa gtgctcaatg ctctagattt gggctggaag ggctggagtc 420 agctacctcc aggggggcag ggcccgggac tggcgggtgc gtgacctccg cccqqctaqa 480 gtccctggca gtggctggcg ggaggcaggg ggccctagct ggcgctggct gcgtggtagt 540 agccggggga ttcgggtggg ccqttcaccc cqaaqcaqqc cccaqctqqc caqtqtqqq 600 atggcccacg ggggcaagtg ggatgctaaa ccctggctgg cccgtgccag acgccagttc 660 cagcccttgc acaggaccca gacccttgcc aacagagcta atgggtgttg ggtggtgcgg 720 ggattacgcc gccggggccc agggacggcc aggcggctgc ggaagccatc cttgttggtt 780 ttggggtaca gtgcaaacag accccqqtcc cccacaqccc cacaqccctq caqqqcccqq 840 aaggccatgg gtgacaggcg cagcagaacc cgcaaccaga gtcgagatat gccccggcgc 900 acceggggge cetgetgeeg cacceatetg ecceegetg ceatageeac cagaggtaga 960 gctaggcctg gccaagctaa gagccaggca gctccaaggc ccaggggaac acccatgagg 1020 cctcggcgcc agctcaggcc caggacggcc cccagtgcgg taccctgggc caggagtagg 1080 aaaagactgg agggcaggtg cagggctgta caaaggagca ggtaggaggc ccccagaccc 1140 accagececa ceteaaggge cageageget geetgeagge caececeace etgggetgee 1200 agcaatggaa gcagcagcag cagcaggagg ggcaggaggc cagaggagga ccccactgca 1260 aaggagaggc cggccaggag gccatgggac aggagtccag ggagctggct ggcaqgqcaq 1320 ggcctcaggt gtgttggagg gggttcagga gggatgtcgg gggaaggaca accatctcca 1380 ggatecetag gggteeeaat eggageeeee tetteetett etteeteete eteagggaeg 1440 ggagtcagtg ctgggccctg gacccagcca agctcaaact cctcatccag aagactctca 1500 tecteettee eccaeaaget ecaegteeca geeteeteet ggeeaacaat geteetetee 1560 tggggtacaa gggagggcac cctaagctcc tctatctcct caggcagacc ccaaacttcc 1620 tcatcaacca ggctcccatg tttttgtgga ctgggactag gggctcctga ttcttccccc 1680 agaatcctct gctgcttggg ctccaaagtg gccccttcct ttcccagaat ccttctctc 1740 ccaactgctt cctcctcctc gccaagcatt ctttqqtcca qqactqcctc ctqqccaqqt 1800 gagcagggct gctgttctat aggggtgcct gtgttgggtg gqcccagagc cccaggaatg 1860 gggagtggaa ggcccggggg gcgctggcct gcacgtactt tgaggctctt gggctgctgg 1920 cgaacctggg ccgcatgctt ctgccgcaac tcttgctcac gccgcttgtt gtactccagc 1980 tggttgccca gctccgtctg gtgctgcagg cgggtgagct cagcccgcgt gcgctgcagc 2040 gccttggagc tgccgcagct ccaqctcccg cqtqqcctcq tqctqccqaa qcaqcaqtqc 2100 acactecaag teettetggg tetgettett gtteaggtee teeegeagea ggteetggte 2160 caggetgtgc cgagecagea acatettgeg ettgtaetgg egacaetgea geteaaagta 2220 ctggcgctgc cgccgcagca gccctgcttc ctcctccgcc tggcactgct ggagctgctc 2280 cttctgccgc agcagccact cggccttctc ccgcttggga gtgctggggt tctcctggag 2340 2400 ctcctccttc agctgttcct tgcgaagttt gtaggtccgc ttctgtgcct ccaqcaqqqc agccagctcc ttcttctgct gcccaaggat gtgctgctgg aacttccgct cctcggcctg 2460 ggcagetegt geeteettet cacetatgge etggtgeege egggeeaget tttetgeete 2520 tgccccaaag ccagcccgct gcgcctcaag ctcccqctqc agccqtqcac tgtqctcctc 2580 cegtteacce eteageegtg acteeaggge cageagetge ttetggtget gtegtegeat 2640

```
ccgcttatag ccgctcagct gctcccgcag cgcagagtcc tgctcatgct cctggatctg
                                                                   2700
acggctgacc agggaggcgg ttcggatggt ggcaaagtgg tctcggttac ggcagtaggc
                                                                   2760
ccggcggcgg gcggaagagg tggtggaagt gggagctggg gctgcaggcg gctggagaga
                                                                   2820
gctgggggtt atctctggct ggtaggggtc atcatatagg ttgtcagagc ccggcagccg
                                                                   2880
gtggataatg gagctgtgag aggtgactgt gtgctccccc tcctgcatca tggccatctc
                                                                   2940
cegggettea gggeettett ecteeteete etetteetee teeteeteet eetetteete
                                                                   3000
gttgtctgag gcatctgcta ggctgttgac ggagctgctc tggctgqaqg cgctgatgqa
                                                                   3060
catgctgggc actgagtggc tactctcgag gctggtcaga gtcccggccc ggtgcatgta
                                                                   3120
gggctcggcc tcctcttcct cctctggggc ctcggcacca gggccgttgg gtgcctcttg
                                                                   3180
gaacaggate ttetteatet tgeggtaetg eaggttgtee ageteeegea eggeateett
                                                                   3240
ggtcctctgg atcaggtcca tgatgactgt gggtggccgc tcccggagca caaagcggtg
                                                                   3300
cttcaggaga acctctgagg ttggtctgtc ttgagggatt ttctgaagac aggagtcgac
                                                                   3360
aaaattccgg aagtactcag accagtgtcc tgactggagc acgggggatt cgttctgtgc
                                                                   3420
aatgtggtat aaggcactca tcgcattcat gttaaagagc ggtggtttcc gttcagccag
                                                                   3480
ctcgatgcag gttatcccca aggaccagac gtccactttg ccatcgtact gcccctcatc
                                                                   3540
catggccagg atcacctcgg gtgccatcca gtatggggtg cccaccgaag aagttggcag
                                                                   3600
gtgccatgat ggacgcagaa ccaaagtccc ctagcttcac taaccctggc tctgacagca
                                                                   3660
ggatgtttcc agccttcaca tccctatgga tcatgttgtg ggagtgcaga tatgccaqqc
                                                                   3720
cctgaagcgc cccgtgggtc acagctgcga tctctacctc ctgaaggggt ttcttgtgca
                                                                   3780
cttctagaag gtcagaagct gagcccaggc aatactccat taccagccaa gccqtqtqct
                                                                   3840
ccctcaggta acagccccgg tactgaatgg tgttgggatg ccgqagcttc tgtaaqaacc
                                                                   3900
gcacctcctt gatgatgtct tgccatttct cattggactg cttcccactg taggacatct
                                                                   3960
tettgatgge caccacetea etatteegga cateceggge aaagtataeg getecaaage
                                                                   4020
tgccatggcc aatttcccgg aggtcagaga agagcttttc tgggtcatcc ttgaagaaga
                                                                   4080
4140
ctgggggccc tgagagtggg gcctggcccc aactgttt
                                                                   4178
     <210> 5608
     <211> 1010
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (1)...(1011)
     <223> n = a,t,c or g
    <220>
     <221> misc feature
     <222> (113)...(255)
     <223> similar to gi1537015 in the genepept database release 114,
```

```
<400> 5608

ggcacgagag gggggatcgc tgggagcggt tgcggcgtgc ggggagctga gttatagctg 60
tgacttctgc cctgccaggc cgcacacaag ctggctgacc cggtttgtaa aaatggaatt 120
tcaagcagta gtgatggcag taggtggagg atctcggatg acagacctaa cttccagcat 180
tcccaaacct ctgcttccag ttgggaacaa acctttaatt tggtacccat tgaacctgct 240
tgagcgtgtt ggatttgaag aagtcattgt ggttacaacc agggatgttc aaaaggctct 300
atgtgcagaa ttcaagatga aaatgaagcc agatattgtg tgtattcctg atgacgctga 360
```

Run with FASTXY 3.3t00, default parameters

```
catqqqaact qcaqattctt tqcqctacat atatccaaaa cttaagacag atgtgctggt
                                                                      420
gctgagctgt gatctgataa cagacgttgc cttacatgag gttgtggacc tgtttagagc
                                                                      480
ttatgatgca tcacttgcta tgttgatgag aaaaggccaa gatagcatag aacctgttcc
                                                                      540
cggtcaaaag gggaaaaaaa aagcagtgga gcagcgtgac ttcattggag tggacagcac
                                                                      600
aggaaagagg ctgctcttca tggctaatga agcagacttg gatgaagagc tggtcattaa
                                                                      660
gggatccatc ctacagaagc atcctagaat acgtttccac acgggtcttg tggatgccca
                                                                      720
cctctactgt ttgaaaaaat acatcgtgga tttcctaatg gaaaatgggg tcaataactt
                                                                      780
ctatccggag tgaacttgat tccatattta gttgaggaaa acagttttcc tcagcttcct
                                                                      840
cacaacaggg gacaaggaag gaaaaaggg gagggtctaa aggaaaaagg ggcttgaagt
                                                                      900
cctttaggat atcttacagt ttttattaaa aggaaqccaa ttacactgga accggggctc
                                                                      960
cctatggatg gcctgctggg gattgcctgt tcgagggngg acggttgggg
                                                                     1010
```

```
<210> 5609
<211> 2189
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(2003)
<223> similar to gi4680647 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5609 eteccaggtg egegettege teceggagee geggaacteg geggeegeea tggegteeaa 60 catggaccgg gagatgatcc tggcggattt tcaggcatgt actggcattg aaaacattga 120 cgaagctatt acattgcttg aacaaaataa ttgggactta gtggcagcta tcaatgqtqt 180 aataccacag gaaaatggca ttctacaaag tgaatatgga ggtgagacca taccaggacc 240 tgcatttaat cccagcaagt catccagctt cagctcccta ctccctcctt cctcccttcc 300 agcgtttcga cctgtaatgc ccacccaggg cagattgtag gaaagggcaa cctcggatgc 360 tggatttcag ggttgaatac agagacagaa atgttgatgt ggtacttgaa gacacctgta 420 ctgttggaga gattaaacag attctagaaa atgaacttca gatacctgtg tccaaaatgc 480 tgttaaaagg ctggaagacg ggagatgtgg aagacagtac ggtcctaaaa tctctacact 540 tgccaaaaaa caacagtett tatgteetta caccagattt gecaecaect teateateta 600 gtcatgctgg tgccctgcag gagtcattaa atcaaaactt catgctgatc atcacccacc 660 gagaagtcca gcgggagtac aacctgaact tctcaggaag cagtactatt caagaggtaa 720 agagaaatgt gtatgacctt acaagtatcc ccgttcgcca ccaattatgg gagggctggc 780 caacttctgc tacagacgac tcaatgtgtc ttgctgaatc agggctctct tatccctgcc 840 atcgacttac agtgggaaga agatcttcac ctgcacagac ccgggaacag tcggaagaac 900 aaatcaccga tgttcatatg gttagtgata gcgatggaga tgactttgaa gatgctacag 960 aatttggggt ggatgatgga gaagtatttg gcatggcgtc atctgccttg agaaaatctc 1020 caatgatgcc agaaaacgca gaaaatgaag gagatgcctt attacaattt acagcagagt 1080 tttcttcaag atatggtgat tgccatcctg tattttttat tggctcatta gaagctqctt 1140 ttcaagaggc cttctatgtg aaagcccgag atagaaagct tcttgctatc tacctccacc 1200 atgatgaaag tgtgttaacc aacgtgttct gctcacaaat gctttgtgct gaatccattg 1260 tttcttatct gagtcaaaat tttataacct gggcttggga tctgacaaag gactccaaca 1320 gagcaagatt tctcactatg tgcaatagac actttggcag tgttgtggca caaaccattc 1380 ggactcaaaa aacggatcag tttccgcttt tcctgattat tatgggaaag cgatcatcta 1440 atgaagtgtt gaatgtgata caagggaaca caacagtaga tgagttaatg atgagactca 1500 tggctgcaat ggagatette acageecaae aacaggaaga tataaaggae gaggatgaae 1560

<210> 5610 <211> 3446 <212> DNA

```
gtgaagccag agaaaatgtg aagagagac aagatgaggc ctatcgcctt tcacttgagg
                                                                    1620
ctgacagagc aaagagggaa gctcacgaga gagagatggc agaacagttt cgtttggagc
                                                                    1680
agattegeaa agaacaagaa gaggaaegtg aggeeateeg getgteetta gageaageee
                                                                    1740
tgcctcctga gccttaggaa gaaaatgctg agcctgtgag caaactgcgg atccggaccc
                                                                    1800
ccagtggcga gttcttggag cgggggttcc tggccagcaa caagctccag attgtctttg
                                                                    1860
attttgtagc ttccaagagg attttccatg ggatgagtac aagttactga gcacctttcc
                                                                    1920
ttaggagaga cgtaactcaa ctggacccaa ataaatccat tattgggagg taaagttgtt
                                                                    1980
cccttcaaga aacccttttc ccttggaagc caaaagagta aacacgggcc cagcggtgga
                                                                    2040
acccaccett tettggccaa gccagcaage tgcggtcgga agaagggtte ttcgccaace
                                                                    2100
cacccccgg ctgttctcat tcaattcatg gtcccacttc tgcttcttgc aaaatggctg
                                                                    2160
gaaaaagtaa taataaatat agctactta
                                                                    2189
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (201)...(2368)
     <223> similar to gi4321664 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5610
acccaactga attcccgggt cgacgatttc gtgqcggaat tccagaagag aaaataatcc
                                                                       60
ctgtctagat gcagaggact tggttcctat tccagtgctc ctccggtagc agggaggcga
                                                                      120
cagaaggtgt ccaactatcc attaccaaga agaaatctat tcgtttgagc ctgagacact
                                                                      180
ctttgaggta aaaaattaga atgaaagaac ctttggatgg tgaatgtggc aaagcagtgg
                                                                      240
taccacagca ggagcttctg gacaaaatta aagaagaacc agacaatgct caagagtatg
                                                                      300
gatgtgtcca acagccaaaa actcaagaaa gtaaattgaa aattggtggt gtgtcttcag
                                                                      360
ttaatgagag acctattgcc cagcagttga acccaggctt tcagctttct tttgcatcat
                                                                      420
ctggcccaag tgtgttgctt ccttcagttc cagctgttgc tattaaggtt ttttgttctg
                                                                      480
gttgtaaaaa aatgctttat aagggccaaa ctgcatatca taagacagga tctactcagc
                                                                      540
tettetgete cacacgatge atcaccagae attetteace tgeetgeetg ceaceteete
                                                                      600
ccaagaaaac ctgcacaaac tgctcgaaag acattttaaa tcctaaggat gtgatcacaa
                                                                      660
ctcgctttga gaattcctat cctagcaaag atttctgcag ccaatcatgc ttgtcatctt
                                                                      720
atgagctaaa gaaaaaacct gttgttacca tatataccaa aagcatttca actaagtgca
                                                                      780
gtatgtgtca gaagaatgct gatactcgat ttgaagttaa atatcaaaat gtggtacatg
                                                                      840
gtctttgtag tgatgcctgt ttttcaaaat ttcactctac aaacaacctc accatgaact
                                                                      900
gttgtgagaa ctgtgggagc tattgctata gtagctctgg tccttgccaa tcccagaagg
                                                                      960
tttttagttc aacaagtgtc acggcataca agcagaattc tgcccaaatt cctccatatg
                                                                     1020
ccctggggaa gtcattgagg ccctcagctg aaatgattga gactacaaat gattcaggaa
                                                                     1080
aaacagaget tttetgetet attaattget tatetgetta cagagttaag actgttaett
                                                                     1140
cttcaggtgt ccaggtttca tgtcatagtt gtaaaacctc agcaatccct cagtatcacc
                                                                     1200
tagecatgte aaatggaact atatacaget tetgeagete cagttgtgtg gttgetttee
                                                                     1260
agaatgtatt tagcaagcca aaaggaacaa acctcttcgg tcggtgccgc tgttctcagg
                                                                     1320
gcctaagtgg ttgttaagcc cgccctcctc cagggtcagc agtgtcaata gggaggaggt
                                                                     1380
aacacctetg ccgtttcccc cagetccatc cgtggctctg ctgcagccag cctccaacct
                                                                     1440
cttggtgaac aatcccagca agttgcttta acccatacag ttgttaaact caagtgtcag
                                                                     1500
cactgtaacc atctatttgc cacaaaacca gaacttcttt tttacaaggg taaaatgttt
                                                                     1560
```

```
ctgttttgtg gcaagaattg ctctgatgaa tacaagaaga aaaataaagt tgtggcaatg
                                                                     1620
tgtgactact gtaaactgca gaaaattata aaggagactg tgcgattctc aggggttgat
                                                                     1680
aagccattct gtagtgaagt ttgcaaattc ctctctqccc gtqactttqq aqaacqatqq
                                                                     1740
ggaaactact gtaagatgtg cagctactgt tcacagacat ccccaaattt ggtaaaaaaa
                                                                     1800
tcgatgggag ggcaagtaag aagagttttg ttgtgaagat tgtatgtcca aattaacagt
                                                                     1860
tctgttttat cagatggcca agtgtgatgg ttgtaaacga cagggtaaac taagcgagtc
                                                                     1920
cataaagtgg cgaggcaaca ttaaacattt ctgtaaccta ttttgtgtct tggagttttg
                                                                     1980
tcatcagcaa attatgaatg actgtcttcc acaaaataaa gtaaatattt ctaaagcaaa
                                                                     2040
aactgctgtg acggagctcc cttctgcaag gacagataca acaccagtta taaccagtgt
                                                                     2100
gatgtcattg gcaaaaatac ctgctacctt atctacaggg aacactaaca gtgttttaaa
                                                                     2160
aggtgcagtt actaaagagg cagcaaagat cattcaagat gaaagtacac aggaagatgc
                                                                     2220
tatgaaattt ccatcttccc aatcttccca gccttccagg cttttaaaga acaaaggcat
                                                                     2280
atcatgcaaa cccgtcacac agaccaaggc cacttcttgc aaaccacata cacaqcacaa
                                                                     2340
agaatgtcag acagatttac ctatgcctaa tgaaaaaaat gatgcagaac ttgattctcc
                                                                     2400
accttcaaag aaaaaaagat taggtttttt ccagacttat gatacagaat atttaaaagt
                                                                     2460
tggttttatt atctgtcctg gatcaaaaga aagttcacca aggccacagt gtgtcatttg
                                                                     2520
tggagagatc ttatccagtg aaaacatgaa gccagcaaat ctttctcatc atttgaagac
                                                                     2580
aaaacattca gaattagaaa acaaaccagt agattttttt gaacaaaaat ctttagaaat
                                                                     2640
ggaatgtcaa aatagttctt taaaaaaqtg tttactagtt gaaaagtcac ttgtgaaagc
                                                                     2700
ttcttattta attgctttcc aaactgctgc aagcaagaag ccattctcca ttgctgaaga
                                                                    2760
attaattaaa ccatatttag tagaaatgtg ttcagaagtt ttgggttcaa gtgctggaga
                                                                    2820
caaaatgaaa actattccac tttctaatgt tacaattcaa cacaggattg atgaactatc
                                                                    2880
tgcagacatt gaagaccagc tgattcaaaa ggtcagagag tcaaagtggt ttgcccttca
                                                                     2940
gatagatgag teateagaaa teteaaatat eacaettett ttgtgetata ttegttteat
                                                                     3000
tgattatgat tgtcgtgatg taaaagaaga attattattt tgcattgaaa tgcctactca
                                                                     3060
aataactggc tttgaaatat ttgaactaat aaataaatat attgatagta aatctctgaa
                                                                     3120
ttggaaacat tgtgttggtc tctgtaccga tggggctgca agcatgactg gcaggtattc
                                                                     3180
tggtttaaaa gcaaaaattc aagaagttgc catgaataca gcggcattta cacattgttt
                                                                     3240
tattcaccgt gaacgtttag tggcagaaaa gttgtctcca tgtttacata aaattctttt
                                                                     3300
gcagtcagca caaattttaa gttttataaa gagcaatgca ttaaattcac gtatgttaac
                                                                     3360
aattttgtgt gaagagatgg gatctgagca tgtgagttta ccgcttcatg ctgaagtacg
                                                                     3420
ttggatatca agagggagaa tgttaa
                                                                     3446
```

```
<210> 5611
<211> 2531
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (997)...(2355)
<223> similar to gi3874427 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5611
aatgaaattg aaaacaatt gaatgccatc agagataata tcaaaattgg agaagatcgt 60
gctgctagac ttgacaggaa aatggaagaa cagcaggtca gacttaatga ggcagaacaa 120
aagtacaagg atattcaaga caaactagaa aagattagtg aagagacaaa tgcacgagca 180
ccagaatgta tggcattgaa agcagatgtt gttgctaaga aaagggccta taatgaagct 240
gaggttttat ataaccgatc cttaaacgaa tataaagcat taaagaaaga tgatgagcag 300
```

```
ctttgtaaac gaattgaaga gctgaaaaaa agtactgacc aatctttgga acctgaacgg
                                                                      360
ttggaaagac aaaaaaaat atcttggtta aaagagagag taaaggcctt tcaaaatcaa
                                                                      420
gaaaattcag tcaatcaaga gatcgaacag tttcagcaag ccatagaaaa ggacaaagaa
                                                                      480
gaacatggca aaattaagag agaagaatta gatgtgaagc atgcactgag ctacaatcag
                                                                      540
gggcaactga aagaattgaa agatagtaaa actgatcgac tcaaaagatt tggccctaat
                                                                      600
gttccagctc ttcttgaagc catagatgat gcttatagac aaggacattt tacctataaa
                                                                      660
cctgtaggcc ctttaggagc ttgcattcat cttcgggacc cagaacttgc tttggctatt
                                                                      720
gaatcttgct taaaagggct tctgcaggcc tattgttgcc ataatcatgc tgatgaaagg
                                                                      780
gtccttcagg cactcatgaa aaggttttat ttaccatgga cctcacggcc accgataata
                                                                      840
gtttctgagt gtcggaatga gatatatgat gtaagacaca gagctgctta tcatccagac
                                                                      900
tttccaacag ttctgacagc tttagaaata gataatgcgg ttgcqqcaaa taqcctaatt
                                                                      960
gacatgagag gcatagagac agtgctacta atcaaaaata attctgtagc tcgtgcagta
                                                                     1020
atgcagtccc aaaagccacc caaaaattgt agagaagctt ttactgctga tggtgatcaa
                                                                     1080
gtttttgcag gacgttatta ttcatctgaa aatacaagac ctaagttcct aagcagagat
                                                                     1140
gtggattctg aaataagtga cttggagaat gaggttgaaa ataagacggc ccagatatta
                                                                     1200
aatcttcagc aacatttatc tgcccttgaa aaagatatta aacacaatga ggaacttctt
                                                                     1260
aaaaggtgcc aactacatta taaagaacta aagatgaaaa taagaaaaaa tatttctgaa
                                                                     1320
attcgggaac ttgagaacat agaagaacac cagtctgtag atattgcaac tttggaagat
                                                                     1380
gaagctcagg aaaataaaag caaaatgaaa atggttgagg aacatatgga gcaacaaaaa
                                                                     1440
gaaaatatgg agcatcttaa aagtctgaaa atagaagcag aaaataagta tgatgcaatt
                                                                     1500
aaattcaaaa ttaatcaact atcggagcta gcagacccac ttaaqqatqa attaaacctt
                                                                     1560
gctgattctg aagtggataa ccaaaaacga gggaaacgac attatgaaga aaaacaaaaa
                                                                     1620
gaacacttgg ataccttaaa taaaaagaaa cgagaactgg atatgaaaga gaaagaacta
                                                                     1680
gaggagaaaa tgtcacaagc aagacaaatc tgcccagagc gtatagaagt agaaaaatct
                                                                    1740
gcatcaattc tggacaaaga aattaatcga ttaaggcaga agatacaggc agaacatgct
                                                                     1800
agtcatggag atcgagagga aataatgagg cagtaccaag aagcaagaga gacctatctt
                                                                     1860
gatctggata gtaaagtgag gactttaaaa aagtttatta aattactggg agaaatcatg
                                                                     1920
gagcacagat tcaagacata tcaacaattt agaaggtgtt tgactttacg atgcaaatta
                                                                     1980
tactttgaca acttactatc tcagcgggcc tattgtggaa aaatgaattt tgaccacaag
                                                                     2040
aatgaaactc taagtatatc agttcagcct ggagaaggaa ataaagctgc tttcaatgac
                                                                    2100
atgagageet tgtetggagg tgaaegttet ttetecaeag tgtgttttat tettteeetg
                                                                    2160
tggtccatcg cagaatctcc tttcagatgc ctggatgaat ttgatgtcta catggatatg
                                                                    2220
gttaatagga gaattgccat ggacttgata ctgaagatgg cagattccca qcqttttaga
                                                                    2280
cagtttatct tgctcacacc tcaaagcatg agttcacttc catccagtaa actgataaga
                                                                    2340
atteteegaa tgtetgatee tgaaagagga caaactacat tgeettteag acetgtgaet
                                                                    2400
caagaagaag atgatgacca aaggtgattt gtaacttaac atgccttgtc ctgatgttga
                                                                    2460
aggatttgtg aagggaaaaa aaattctgga ctctttgata taataaaatg agactggagg
                                                                    2520
cattctgaaa a
                                                                    2531
```

```
<210> 5612
<211> 2161
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2102)...(1410)
<223> similar to gi1730284 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5612
agcgtagtct acactgctgt ttattcaaac aatcccctat taatgaatat ttggattgac
                                                                       60
tctaatctgc ttttaaaaaa taaccatgga tacaatttgt acttaatacc tggaagttaa
                                                                      120
aaaaactggc actgtcattc tcttgatcac tctcctgatc ctctgacttc ttgaattccc
                                                                      180
atttcctcaa ctgtaaaaca aggaatttta atatgactta cctatccggg ttaaataaaa
                                                                      240
ttgcaattca aaaagtattc ccatatatgt taagaaaaac tgaaatagcc actaaaatgc
                                                                      300
attcaaaata aataaattat ataattatca ctacacagat tcaccataca actcatttct
                                                                      360
acttaagaga ttcatataga cacaatgaca aaatagattq tqtccacaga aagatcgaga
                                                                      420
gtgaaatttc cagaaactat cttagatgaa ataattgaag aattcaggtt aaatatttat
                                                                      480
tgaacaaatg cagagtaaat gaactaaggg ctgttataac cttaagttac aacaaacaac
                                                                      540
ttcaaatatt cagagggctg tcacacagag aatgaaagac ttgctcagta tttctccaaa
                                                                      600
gggcagaact tgagccaagg gataaatata agcaaccaat gggctgcagg atagttgtac
                                                                      660
aaagtgtatc atgtatcttc atagcttctt tgcccatata atgcattcca cacttaagtt
                                                                      720
tctccttcta aaaggcgaca gcacaagtta atatgtctca taaatgtctt aaataagttg
                                                                      780
cattttcatg gcaagccctc cactgccagc aatggatata ctcacactat tggaaaaaat
                                                                      840
ctaaagttaa caaactggtt tagtatggaa atggtctatt tgttcctcag ctatgtttct
                                                                      900
gtatcttaca ttagtggctc tcaggaggtg gggggtgaaa agagagcatg ttctccaaag
                                                                      960
agggtgaatc ataatcccca gtgattcaga tactgtgcct ggggacaatc tttcttcaag
                                                                     1020
tccaaatgaa tcattataat tatcaaccaa tggtacatat aagagtacgg catgtgctgg
                                                                     1080
gacagagaaa agacagttga caaacactat tctacatgaa acaggaaatc ttattttatg
                                                                     1140
agtcactaga aaactaactg taatactgac aggctccatc cagattatta aatactacaa
                                                                     1200
aatgagaact gtttcaacaa ctattcagca taacgtttat ggacaaaatg tatatagtat
                                                                     1260
atcttatatt ctatatgtat tttatcacat agtaaggaat gctgaggtgc ttaagccatc
                                                                     1320
caataaattg aaaatacaaa ctttacattt ctacgtttgt cagtatacag gattctgaag
                                                                     1380
atgaatettg aacteagagt gataaateag tttteaagga aageeacata ateegteagt
                                                                     1440
ctggctaact gctgttcatt gggtattggg ggaactggag caggctctga taagggaata
                                                                     1500
aacttgttaa aggaaacatc cagggcccct gcaactggct ttctgggcag aaccattctt
                                                                     1560
gtggtggaat cagcttgcca tccttgttct aatatgcctt tcacagcctc ttctacagga
                                                                     1620
agtccaacaa aggctgcaaa atcatcggcg atgattgaag tatacgcttg agagaccagg
                                                                     1680
gcaaaggcgc gtctccttgt tgcatctcta agtgcttcca taattggctg gaccqtctca
                                                                     1740
gaccactggt gagcgttgat ggttgtatag atcccaggga aatctctctg ccagattctt
                                                                     1800
tgtcctactg accaaattcc cccaagttca gaatttgcag attttatagc aggtggtatt
                                                                     1860
cttttccaaa gatatcttgc attattcatg tcattatgga gcaaatataa agctagaagc
                                                                     1920
tgaccataca ctgggggtgt agcaattcct ccaggggcta ttataagaaa caaattcgac
                                                                     1980
agattcctga agcattctga ttctgcccat tacatcaagc gtcctcgagc tcctggttct
                                                                     2040
cgcactgatc cagcaacttt ttgaaactaa aggcgctttc cgccatcacc gccactggca
                                                                     2100
tettegegge eggeetegee getgeacegt eeggacaaac aaaaaceage eeacgegtee
                                                                     2160
                                                                     2161
```

```
<210> 5613
<211> 2293
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2155)...(1087)
<223> similar to gi210699 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5613
cccgaggaag gctagactgt taagtgtcac gtatatacgg tctcaatgga gcctcaggaa
                                                                     60
gctattaaac aacctcaaat cacaaaatca gaaaagtgtt gaacatttag aggaagaata
                                                                    120
gaaaggaaaa aaaagcctcc aagttgtgta ttatttgtca gtaaagcaaa acaaatgtgt
                                                                    180
aagcccactt atatttaata atgtctcact gaaattaaag taatagggga gagtctgaag
                                                                    240
tttccacaga taaagagagt gctgtactca aatttactac aaaattaata atagtaaatg
                                                                    300
taaaatatgt atttatacag ccttttgcag acttatgaac tatctcaaat tcacgaatcc
                                                                    360
tattttttaa atacagtttt aagtttcaac cacttgtatc accagaattt tgagacttaa
                                                                    420
ctcccatggt taagagattt ccaagctgtg ttcacacctg tagtcccagc tacactgaaa
                                                                    480
gctaaggcgg gaggaccaca tgagcccagg agttccagac tagccttgct ctatttaaag
                                                                    540
agcaagactc cactgccaaa aaaaaaaagg aaaaccaaaa aaaaaaattc cataaataac
                                                                    600
tgggtttcta aaattccatc ttttcagtga aacagtacat cacttaaggc taaaactatg
                                                                    660
tettttatea etgtaagtee eeagtaetge ttacaceeta cacagagtag atgeteaata
                                                                    720
aatgtttgat gatttggcaa ttaatgggat aggagggaat attaatatgt gtcaataaat
                                                                    780
tactctgaat attataaata ggcttatgag tatggaaaag acccaccctc aaggaatttg
                                                                    840
tgatcttttc tcttacatca tactgctgtt ttcaatatgc cataattttt ctttcttca
                                                                    900
gggtggggtc agggaaacaa cacaaaatag ctgtggatgc tgtttaacaa tcagcatttc
                                                                    960
ataagcagtt aagaatttct gtactttcac aaaaatqaaa aaatctctct aaaqattatq
                                                                   1020
tgagcccaat ctatgcccaa atctttttt ttttttaat atagagaact gattatgttc
                                                                   1080
acttgtaacc tgtcattcca aaattcttca ggatgtttaa tgttcaagtg tccatattcc
                                                                   1140
cagtcccact ggatgcctgg caggatgcaa ccatctgaat gagtggaagt ataatgtttg
                                                                   1200
caccaggtat tatattagga gccttgaacc cagaatatgt ctgattaagt cttttagccc
                                                                   1260
aataatttgc cactgctgcc aagtctggta attttgaagg agaaagttca accataacgg
                                                                   1320
ggtgatacag ggcacccccg tactcaaaaa aactttcaaa gtgctttcta aacaagtttc
                                                                   1380
tettteteet tgaatacaac gteagteaca actgatggea gtacaatega tecatecata
                                                                   1440
cactgctcta agaacatctt gatggtataa tatgctgtca ttcatgctct acctgctact
                                                                   1500
agtttaattt ggtcaagtag ctctttccct ggagactcaa attctactag actcaaattc
                                                                   1560
tattagacca aagacaaatg atctcaacca tggtcttcac ttaaaccaat cactggccct
                                                                   1620
gcattataac tgagcaacaa gttggcacaa tcaccatgtg ttggttgctg gagagctatc
                                                                   1680
atcagggtct tgaattgctt ctgaacctgg agactgctgg cacggattct gtcacttgac
                                                                   1740
1800
caagaatgta aattgeggat cetteeettt gtggetttgg ceatacagea ttttagtttt
                                                                   1860
gttctttcca ttaactgaag tcacgaggta tgcctccttg gaaactccaa cagttaagag
                                                                   1920
attctcatgt attccatgaa ataaaaagca aagaaaaatc aaacttgtct taatgagatg
                                                                   1980
gaagtgttgg atcaaacact gattgagctg ttctatgtcc tccacttccc cagtgcctgg
                                                                   2040
atgtggttca tctgcatcga tggatactgt ccaaatttgc cacttggctc aaaagactgc
                                                                   2100
tgcccagtga atggtaatgc agatagaggc tcagaggtat ccatgggttc ctccatgatg
                                                                   2160
aacaatggtc ttgattgctg aagcgattgt ttctgattgg ttcctatgcc cagatctgta
                                                                   2220
cctcccacct tgggaggctg agggaggata gcttgagccc aagtgttcaa agttgacagt
                                                                   2280
gagctatgat cac
                                                                   2293
```

```
<210> 5614

<211> 1378

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (167)...(1165)

<223> similar to gi4200234 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5614
gtcgggcctc ctccagtaag aagcgtgggc gagtagtggt gtcgccagtg gcaactgaag
                                                                     60
ggagtaatgg agataaaaca aaagcgaagg cgaagttaaa gcactccacg agttccctcg
                                                                    120
gattaaacgc cggagagagc gtgaatttgc ctcqqqqacq cctctccaqq aatqtcqqat
                                                                    180
tgcacatcct attgtaaaat gtacttactg cagatcagaa tttcaacaag agagcaaaac
                                                                    240
taacacaatt ttgtaagaag tgtgctcaaa atgtgaagca atttggggac ggccaagcct
                                                                    300
ttttcagtac tgtaacataa tttcagcatt ttttggtacc aagtgtcagc gttgcacaaa
                                                                    360
ttcagaaaaa aagtatggac cacctcagac ctgtgaacag tgcaaacagc aatgtgcttt
                                                                    420
tgatcggaag gaggaaggaa gaagaaaggt tgatggaaag ttattatgct ggctctgtac
                                                                    480
tttatcgtac aaaagagttt tacagaagac gaaagaacaa aggaagagcc tgggatcttc
                                                                    540
acattcaaat tcatcttctt catctcttac tgagaaagac cagcatcatc caaaacatca
                                                                    600
tcaccaccat catcaccatc accatcgtca cagcagtagc catcacaaaa tcagcaatct
                                                                    660
aagtccagaa gaagagcagg gactgtggaa acagagccat aaatcctctg caacaattca
                                                                    720
gaatgaaact ccaaagaaaa agcccaaatt ggaatctaag ccatctaatg gagataggtg
                                                                    780
tatgtaatgt gtgccattag taaggtaatt tgccagttgc atccatttct gtcagtagct
                                                                    840
ctataaatca gtcagcagat agtgggggaa cagacaattt tgtccttata agtcaactga
                                                                    900
960
aagataaaaa gttaactgaa ctaaaggcag actttcagta ccaagagtca aatttgagaa
                                                                   1020
caaaaatgaa cagtatggaa aaagcccaca aagaaactgt ggaacaactt caggccaaaa
                                                                   1080
acagagaact actcaaacag gtcgcagcat tatcaaaggg taaaaaattt gacaaaagtg
                                                                   1140
gaagcatact aacatctcct tgagaaagtc atttgtttag catttcttct tacaatgtaa
                                                                   1200
atttggggaa aaaaaattct gtgaagccct taaattctgt gtagtagaaa aatatttttg
                                                                   1260
cacaccaaat gaattggtgt gtttcctgtt cacttttgta attgatatac agcattttt
                                                                   1320
aagttgtaaa acattcaaat aaaacttcaa ctggtttgaa gtaacttttt aattaaaa
                                                                   1378
    <210> 5615
    <211> 2473
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc_feature
    <222> (94)...(1892)
    <223> similar to gi3047308 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5615
cccacgcgtc cgcaaggagc taaggccttc agtgtcccct tccttaccca ggtttctcac
                                                                     60
agaatggatt cccagcggga acttgcagag gaactgcggc tttaccaatc cacccttctt
                                                                    120
caggatggtc taaaagatct cctggatgag aaaaaattca tcgattgcac cctaaaaqca
                                                                    180
ggtgacaaaa gtcttccttg ccacagattg attttgtcag cttgtagtcc ttacttccgt
                                                                    240
gagtactttt tatctgaaat tgatgaggcg aaaaaaaagg aggtagtgct agacaatgtg
                                                                    300
gatcctgcta tacttgattt aatcatcaaa tacctgtact ctgccagtat tgatctcaat
                                                                    360
gacggaaatg tgcaagatat ttttgcattg gccagccgct ttcagatccc ctcagtgttt
                                                                    420
actgtctgcg tttcttatct tcagaaaaga cttgctcctg gtaaactgtc tagccatcct
                                                                    480
aagattagga cttcttcttg actgcccgag actcgccatt tctggcccgt gaatttgcgt
                                                                    540
ctgatcgctt tgtacagatt tgtaaggaag aggactttat gcaactggtc tccacaggaa
                                                                    600
ctgatctcag tcatttcaaa tgacagccta aatgtagaaa aaggaagaag cagtatttga
                                                                    660
```

```
gggcagtgat gaaatgggtg cggaacagac aaggaaaaca gggttaaaaa cctttagtgg
                                                                   720
aagtgtttgg attgtatccg ttttcgcctt atgacagaaa aatattttaa ggatcatgtt
                                                                   780
gagaaagatg atataattaa aagcaaccca gacctccaga aaaaaatcaa agttctaaaa
                                                                   840
gatgettteg caggeaaact cecagaaeet ageaaaaatg cegegaagae tggggetggt
                                                                   900
gaggtgaatg gtgatgttgg tgatgaagat ttacttcctg gttacctgaa tgacattccc
                                                                   960
aggcatggaa tgtttgtaaa agacctcatc ctcttggtta atgacacagc agcagtggct
                                                                  1020
tatgacccca cggaaaatga atgctacctt actgcactgg ctgagcagat tcccagaaat
                                                                  1080
cattccagca ttgttaccca gcaaaatcag atatatgtgg taggaggact atatgtggat
                                                                  1140
gaagaaaata aggatcaacc tctacagtca tacttcttcc agctcgatag catagcatct
                                                                  1200
gaatgggttg gacttccacc tctgccttca gccaggtgtc tcttcggtct gggagaggtg
                                                                  1260
gatgataaaa tctatgtagt tgcaggcaaa gaccttcaaa cagaggcttc gctggattca
                                                                  1320
gtattatgct atgatcctgt ggctgcaaaa tggaacgaag taaaaaaact ccctatcaaa
                                                                  1380
gtctatggcc ataatgtgat ttcacataaa gggatgatat attgtctagg aggaaagaca
                                                                  1440
gatgacaaaa aatgtacaaa cagggtgttt atcttcaacc ccaaaaaagg agattggaaa
                                                                  1500
gatctggctc caatgaaaat tcctcgttcc atgtttggag tagcagtcca taaaggcaaa
                                                                  1560
attgtgattg caggaggtgt cactgaagat ggtctttcag cttcagttga agcttttgac
                                                                  1620
cttacaacaa ataaatggga tgtaatgacc gaatttcccc aagaaagaag ctccatcagt
                                                                  1680
ttqgtcagcc tggctggatc tctgtatgca attggtggtt ttgctatgat tcaactggag
                                                                  1740
tctaaagaat ttgcacccac tgaagtcaat gacatatqqa aqtatqaaqa tgataaaaaa
                                                                  1800
gaatgggctg ggatgttgaa ggaaatacgt tatgcttcag gagctagttg cctagcaaca
                                                                  1860
cgtttaaatc tcttcaaact gtctaaactg tgaacaaggt gacaaaacat aatagattgg
                                                                  1920
gaggtggttt gtttggtgaa tggggcttta atttattctg ttttttaaaa gcttgtacag
                                                                  1980
acactcatgt agaaattatt caagaagtta ttgtctaaga gatgagcagt aggtaagaaa
                                                                  2040
acctcagtca ttgactcttc aatgtaatga tcagagttta aaaccatttt ctaataataa
                                                                  2100
attaaatctt cagttgaaca aattattttg tgaatctgtt tcactcaatg gattgtaaag
                                                                  2160
2220
aactgatttt ctattacaat tggaagtgga gaatatgtgc atctacacta aaaaaatgtt
                                                                  2280
taagatatca aaaacctctc ctcgtgcttc aaaatgacag gaatcctgtg cattatacta
                                                                  2340
agaattacat gccataagat gactgacttc agaaatccta cttcagaagt gtaataaatg
                                                                  2400
gatgaggaaa tcgtttgatg gggaaaagtc tcttgtaagt aaaagtagtc aaattcaaat
                                                                  2460
ggcaaaaaaa aaa
                                                                  2473
```

```
<210> 5616
<211> 1894
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)...(1895)
<223> n = a,t,c or q
<220>
<221> misc feature
<222> (51)...(689)
<223> similar to gi5566244 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5616 cctcctgaga gttcgccggc ccgggcccaa tgggnttgtt ccaaggggtc atgcagaaat 60

```
acagcagcag cttgttcaag acctcccagc tggcgcctgc ggaccccttg ataaaggcca
                                                                      120
tcaaggatgg cgactgaaga ggccttgaag accatgatca aggaagggaa gaatctcgca
                                                                      180
gagcccaaca aggagggctg gctgccgctg cacgaggccg catactatgg ccaggtgggc
                                                                      240
tgcctgaaag tcctgcagcg agcgtaccca agggaccatc gaccagcgca ccctgcagga
                                                                      300
ggaaacaagc cgtttacttt ggcaacgtgc agggggcanc ttggactgtc tcctgtcact
                                                                      360
gctccaagca ggggcagagc cggacatctc caacaaatcc cgagagacac cgctctacaa
                                                                      420
agcctgtgag cgcaagaacg cggaggccgt gaagattctt ggtgcagcac aacgcagaca
                                                                      480
ccaaccaccg ctgcaaccgc ggctggaccg ctctgcacga gtctgtgtct cgcaatgacc
                                                                      540
tggaggtcat gcagatcctg gtgagcggag gagccaaggt ggaatccaag aatgcctacg
                                                                      600
gcacaccett gttcgtggcc gcccagagtg gacagttgga ggccttgagg ttcttagcca
                                                                      660
agtacggggc tgacatcaac acgcaggcca gcgacaacgc gtctgccctc tacgaggcct
                                                                      720
gcaagaatga gcatgaggag gtggtggagt ttctgctgtc acagggtgcc gacgccaaca
                                                                      780
agaccaacaa ggacggcttg ctcccgctgc acatcgcctc caagaagggc aactacagga
                                                                      840
tcgtgcagat gctgctgccg gtgaccagcc gcacgcgcat acgccgtagc ggcgtcagtc
                                                                      900
cgctgcacct ggcggccgag cgcaaccacg acgaggtgct ggaggcgctg ctgagcgcgc
                                                                      960
gcttcgacgt gaacacgccg ctggcgcccg agcgcgcgc cctctacgaa gaccggcgca
                                                                     1020
gctccgcgct gtacttcgcg gtggtcaaca acaacgtgta cgccaccgag ctgctgc
                                                                     1080
aacacggcgc cgaccccaac cgcgacgtca tcagcccctt gctcgtggcc atccgccacg
                                                                     1140
gctgcctgcg cacaatgcag ctgctgctgg accacggcgc gaacatcgac gcctatatcg
                                                                     1200
ccacgcaccc caccgccttc cccgccacca tcatgttcgc catgaagtgc ctgtcgctgc
                                                                     1260
tcaagttcct catggacctg ggctgcgacg gcgagccctg cttctcatgc ctctacggca
                                                                     1320
acggcccgca cccgccggcc ccgcagccct ccagcaggtt caacgacgcg cccgcggccg
                                                                     1380
acaaggagcc cagcgtggtg cagttctgtg agttcgtatc tgccccagag gtgagccgct
                                                                     1440
gggcggggcc catcatcgat gtcctcctgg actacgtggg caacgtgcag ctctgctcgc
                                                                     1500
ggctgaagga acacatcgac agctttgagg actgggccgt catcaaggag aagaaccact
                                                                     1560
tgttctggaa aactcaccac ttgacttcag agctttctct ccaaagacta agatgaagac
                                                                     1620
gtggcccaag gtagggggta gggggagcct gggtcttgga gggctttgtt aagtattaat
                                                                     1680
ataataaatg ttacacatgt gaaaaaaaaa aaaaaggggg ggccgtttta aagaatcaag
                                                                     1740
ttttatttcc gggggctggc aaggtaaaat tttttttttg gggcccccaa aatcaatttc
                                                                     1800
egggeeeggg ttttaacaac gtegggaggg gaaaaceeeg ggggtteeee atttaatteg
                                                                     1860
cttggagcaa aannnnnnn ggtggannat tcag
                                                                     1894
```

<400> 5617
gttttctcca catggaaact tattggcgct tgcctcacga gacagaaccg tgagactctg 60

```
gatteetgat aagagaggaa aatteteaga atttaaaget eataeagete eagttegaag
                                                                      120
tggagacttt tcacctgatg gccagtttct agctacagct tctgaagaca aatccataat
                                                                      180
agtatggagc atgtatcgcc agcgcttcct gtattccttg gatcgacata cacactgggt
                                                                      240
acgctgtgcc caatttncac ccgatggaag actaattgtg tcatgtagtg aggataaaac
                                                                      300
tattaaaatt tgggatacca caaataagca atgtgttaat aacttctcag attccgttgg
                                                                      360
atttgcaaat tttgtggact ttaaccctag tggtacatgc atagcttcag caggttctga
                                                                      420
tcaaactgtg aaagtctggg atgtaagagt gaacaaatta ctacagcatt accaagttca
                                                                      480
cagcggtgga gttaattgca tatcattcca tccttcgggt aactatctca tcacagcttc
                                                                      540
ttcagatggt accettaaga ttctggacct cttaaaagga aggeteatet atacaettea
                                                                      600
aggacatacg ggacctgtct ttactgtttc attttcaaaa ggtggagagc tatttgcatc
                                                                      660
aggaggtgca gacacacagg tcttattatg gaggactaac tttgatgaat tgcattgtaa
                                                                      720
aggtcttacc aaaagaaatc tcaaaagatt acattttgat tcaccaccac atcttcttga
                                                                      780
tatctaccca agaacaccac atccccatga ggaaaaagtt gagactgtag aagatttttt
                                                                      840
tcttcatctt ttgagattaa tccaaagctt gaggtaatcg atttgcagat ctctactccc
                                                                      900
cctgttatgg atatcctttc ttttgattct accacaacaa cagaaaccag tggtaggact
                                                                      960
ctgccagaca agggtgaaga ggcctgtgga tatttcttga acccttcctt aatgtcacca
                                                                     1020
gaatgtttgc caacaaccac gaaaaagaaa acagaagaca tgagtgacct cccctgtgaa
                                                                     1080
agtcaaagga gcatacctct cgctgtgact gatgctttag agcatattat ggaacaactc
                                                                     1140
aatgttttga cacagactgt ttcaatcttg gagcagcgac tgactttgac agaggataag
                                                                     1200
ctgaaagact gccttgaaaa tcagcaaaag cttttcagtg ctgtccaaca gaaaagctga
                                                                     1260
ataaaaaatt cattttcatt tgttgggcag aggcccaata aatgaacaaa tgtacataca
                                                                     1320
ctcaggaagg tagtacaaga tactccatac aacacaacca tgtgctattt atcatggcat
                                                                     1380
ttcttaaaag ggtgagcaac agaacaaaag gcagaaaagg catacctaag gactaattta
                                                                     1440
aacacatatc aatgtgaagg actaatttaa attactatca tttatgattg cagtaataaa
                                                                     1500
gtgataagca ttcaagcaac tctgtatttt ccccatatta ttttaaatgt ccattttcat
                                                                     1560
ttataggcca aatcctgcca ggaaagtaac cagatctctg gatttcactg ttaagtcatt
                                                                     1620
tcagattgac catattcaga cagtcatggg gtgaaataat tcacttacct ccaaaatagc
                                                                     1680
atcctatatg ccaataatga gttattgatc tgactagttg tatgtctttc tgttcaaaat
                                                                     1740
agaaattatc ctttcttact aatgccttga aagaatgaac aaataaaaat tcccagacca
                                                                     1800
cagaatttcc acagcaagaa tacacttatt ttaattaaca atagcacaga tatagcatag
                                                                     1860
ggcagtgggt tttttagtta atttatggcg tactttgttt atccattggc caacctgaag
                                                                     1920
gaaatgaaac tcacctatct ttctatcaca gatgaatgtg ctagatgaat gatttgggtt
                                                                     1980
gtatctgatc atggttcaca aaaattatgt tagtgtgttt tcagtatgct aaaaagtcag
                                                                     2040
agtgatacaa aagtgatatt taaaaatata cacacatgta tgtacacatg cttcagaaat
                                                                     2100
attgttgctt agggtgattt gggcagctaa atagtaagta ctttttaaaa tttttgcatc
                                                                     2160
atcatcttcc tatttaatga attgtgattt aaaacaaaat gaaaataagc caggtattct
                                                                     2220
aaaagatcct ggatacaaat taagaatttt gctttatttt aaaccaaatt gagattaaat
                                                                     2280
tgaagaaaag caagcaaatt aatttcagct tgattatcaa cctgtatcaa gaacaaaaat
                                                                     2340
gggaggaggt gtccacattt atggtgtgta taggtaacat ggggaaaatg ctattctgtg
                                                                     2400
ttttggaaaa gaagaaatag tgccgtccta tttatttcta tatttagaaa tttttctcaa
                                                                     2460
agaaatttca attgtatcta tgagatgggt ttctaagtat cttattgtgt gttataagtg
                                                                     2520
ccttttaata tcatactaag tgtgagcttc tggacatttt caagagctta caaaaactaa
                                                                     2580
gtggcattgt atttttataa ccccattgag aagactaagt aagaaatgaa atgtcctatc
                                                                     2640
aattttattt tgtcatgctt caaacaataa agacatttct gctttaaaag aaaaaaaaa
                                                                     2699
```

```
<210> 5618
<211> 1607
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1309)...(472)
```

<210> 5619

## <223> similar to gill50426 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5618
ttaaagaaaa tactttatta tgtcatgaaa aaaaaggcct caaccaacta qattcatact
                                                                       60
tgatttgaaa aaaaaatgga aaatttatta attagacagt atgtgggcat cctgttccac
                                                                      120
atgggaatga gaagatgcta taggttctct aagtattgca cagtctgaaa aaataacaaa
                                                                      180
aaaagggaag gggaggaaaa aaaaaatcac atgatattgg gaaccatctc acattatgaa
                                                                      240
taatctacca agaaacattt aaaaaagaaa accctttgtt tctacagtag ctttaagttt
                                                                      300
atagttettg gaatgaetgt atteeattga agacatetea qtaacaggaa getgttttag
                                                                      360
caatcccatg tgcaaatatt aataaaaaat atataaaata atgcaattca tctcttgcct
                                                                      420
tcaccccggc aatcatgaca tttctgagaa ctgttttgct tgaaaatggg ttaagctgta
                                                                      480
agttttgcct gaagctccat ctctgcagcc cgtttgagtg caacatccac tagaagctga
                                                                      540
aatccactga agtcctggtt gaggtccggt ggagtagggg gaggagtgtt gaaaagacca
                                                                      600
ctctgtgtat tcgtacttgg tccagatcta caagtgtccc tctqqqtaac atqaaaagag
                                                                      660
gtgtcctgtg aaagtttttg gcccgcctat ctgcctgtaa tatctgtgtt ttgtcccac
                                                                      720
accgaccgac tggcagagag agaaagggac aatctttcaa tggcagtcac agtggtatgg
                                                                      780
cagatcactg atggacgagc caaaactgat ccccagggat gaccggctta ggagacagtg
                                                                      840
gccctcccta gggttgggtt ttggccccag ctgtacagga atgaaatggg gtctcctcta
                                                                      900
gagctggcat gaagtttttg atgcccatca cggactccac agagctcgtt tcagaaatct
                                                                      960
tggccccacg gcgggaaatt gtgaactgat ttggatcttt gccatccttt ctcagcatgt
                                                                     1020
cagggaggag cctgcggcgg gcgttgatga accagttaca gacctgtagc qtagacaggt
                                                                     1080
gtgtttgctg ggacagcaac gctttttctt gctctgaagg ataggcattg taacggtgct
                                                                     1140
catacagcca atcccgaaga atctgcacag actccttggg taggttgccc cttctccttc
                                                                     1200
tcttgcctga gccagcggat gaagaaaggt ccaagggaat gtccatgctg tcctcatcct
                                                                     1260
cagteteact gecagatget geaacaatac etttettgee titeattetg gateteecet
                                                                     1320
cccagcgcga ggcaaggcgg gggtctggag gggccaqqaq cqqqqacaca qqqqataaqc
                                                                     1380
gaacgtctcc ttcacagccg actctcccgt aacttgtagg acgtgctcca gccgttattg
                                                                     1440
ctaaacagga cgctctgatc ccaggcgccc gctccttggg tggaattcaa gtgacacttg
                                                                     1500
ggcttcctcc cgccgggatc ttctggcagc cggccggggg ctctccctcg cccaactctc
                                                                     1560
teceeteece teteegetee tttgtteeet geteetgete ggegeae
                                                                     1607
```

```
<211> 1529
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1519)...(728)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5619
ctgtattgtg caaatccact gaatatgttt gttagttcca gtactatttt ggttgagtct 60
gtgattttct acacagaagg tcatgtcgtc tacaaacaaa tgtaatttta cttctttctt 120
tctgatttgg atgagtttga tttcttttgc tattaattg ctctggctag gacaggcagt 180
```

```
attgattgaa tagaaggggt gagagcattc ttgcatcatg tgagatcgta caggaaaqca
                                                                      240
ttccattttc cctgcttggt tatttactca tttgtcattt catggatgtt ctttctattg
                                                                      300
ttgaggtaaa tttccttttc tattttgttt aggatttcta tgatgactgg attttgaatt
                                                                      360
ttqtqqaacq cttttctcc atctactaaq gtqatgtggt tttaatcttt cattctgttc
                                                                      420
tagtggtata taacattgat ttgcttgaat atgttgaacc atccttgcat cccaqaaata
                                                                      480
actggcactt gaatatctac atttttttaa tatcctcttg aatacagttt tctaggacaa
                                                                      540
gggatcttca agaagttctg gaaaaataca tattatqaqa aaattqtqca tqaatttcac
                                                                      600
aatttttgca ccaaaataaa ctagtgctag tctgttataa catgtctgaa caggctctag
                                                                      660
tttgatgccc tcaaaaggat aagacatgag tataaaaaga gactccatca aagcaatata
                                                                      720
aattctgatg aaattgaaac aagaagaaac attaaattta tgatgagacc agatgcagtg
                                                                      780
gctcaggcct gtaatcccag cattttcaga ggctgagaca ggtgggccac atgagcccag
                                                                      840
gtattcaaga ccagcctggg aaacgtgggg aaatcccctt ttctacaaaa aatacaaaaa
                                                                      900
ttagctgggc atggtggcac atacctgccg tctcagttat tgtgaagtct gtgcagggag
                                                                      960
gatggcatga acctgggagg tcaagattgc agtgagctat gatcatgcca ctgcactcca
                                                                     1020
gcatgggtga tggagagaga tactgtctta aaaaaagaat acttgtggta acgtttgggt
                                                                     1080
agaggaataa tgaaatcatt gatgctttat aaaaaggtta tggggacaat gcccaaaaga
                                                                     1140
aataaacagt ttgtaaacgg ataacttatt ttgagttagg gcaagacaat gttgacagtg
                                                                     1200
atgcatgaag cagcaggcag accttccaca tcatttttac agaaaaaaa attaatcttg
                                                                     1260
ttcatgctgc aatgaagagg actgacagca aacagcagaa acatagtcag aatttagaga
                                                                     1320
acagcetggt taacatggtg aaacaccate tetagtaaaa atacaaaaat tageteagea
                                                                     1380
tggtggcatg cgcctgtaat cccagctact caggaggctg aggcagggga atctcttgaa
                                                                     1440
cccaggaggt ggaggatgca gtgaactgag atggcaacat tacactctag cctgagcaac
                                                                     1500
aagagcaaaa ctccatctca aaaaaaaaa
                                                                     1529
```

```
<210> 5620
<211> 4494
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4482)...(3139)
<223> similar to gi4240263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5620
tttttttttt ttgaagtttt tgctataaaa catttaatgt taacctacaa tacaatgtaa
                                                                       60
acttttatga aaaaaattta aagtacacta gatttcttca gtaaattatc acatgactat
                                                                      120
tcaggcgcag tacaagttgg ggcactgcat cctttgtgga tggatttccg ttgctgtgtt
                                                                      180
cctcacaagt cctaaaaaaa ccagttgtag agcggagctc cttgttcaag caccggataa
                                                                      240
tgatgcccct gattttgcat tctgggggtt atcgctcctt ctcaqtcatt ttctqaaact
                                                                      300
ctttqcttgg ccttqgcacc attagcaatt ttcacaactg ctcaattgaa ggttctaggt
                                                                      360
tetttttage ttagttttta agagacaagt gttateetet ggecatetet tatteaaata
                                                                      420
tcatggtgga ggcaagcaag gagaaagaag tatttgctag aggaaattct gcagaagtgg
                                                                      480
aagaaaagac cagaagggct ccactgaggg tacaaatatt caactgactc caatcgagtg
                                                                      540
tctttgcttq qtcacttccc atggttattc agctcaatct acaacttcag tcgtgggagt
                                                                      600
gcagaacaaa acttgaaaca agtgctttta gttgatgatt tgccatttgg aaacaacagc
                                                                      660
tgaaatatcc cagaggtgat gtggaaacaa gagcaaatgc ttgcagatca ctggcttctc
                                                                      720
agtgtcttct ccctcgcagg tctcatcaaa atcccaaaag tccttaggag taacacagat
                                                                      780
tgtactggca ttaagtgaca aaatgtgcag cctgtatttg actgaggagg aaaggaaatg
                                                                      840
```

```
gcacctaggc agcagcgcta gggtcagcaa ggagaccggc ctagggtctc agtaaagcag
                                                                      900
aactgtttca aatgggacta gaccggggca tgtgcttccg gtgaatcctc ttgaaaccta
                                                                      960
aagtaaatgg gaaggccgcc ctaacagttg tactgacata aagggagacc cttcttaata
                                                                     1020
ttctggcagc tgacttcctt cactgaacaa ctattatcaa aaggcgagag gcataaagtg
                                                                     1080
cacactgtag aataagaaga gactgaatta tgatggaaaa aaaaaatcgt aacttcccca
                                                                     1140
aagaggtgtg gacagtgtac ctagcctcac aaaggtcctt aataccctcc tgtgtgctqc
                                                                     1200
cagggaacag ctgtgaattc cagatgggga ggaaggctct gacttaagtg gaaaaattcc
                                                                     1260
tctgcatggt tgtcagcagg aaggtttcac gtaaggttat ccttatgtgg agaacatggg
                                                                     1320
ttatcctgct gttcacgcca gatacatttt attgacaaca gtcagatggt gattccactc
                                                                     1380
atctggcctt gggacagcag aaaacgaagt ggaagaacaa tagctggcca gggacagaat
                                                                     1440
taaattttcc tagagatggt gttctagaca gctatgccaa ggccactggg aatttctcag
                                                                     1500
gctctccaag ttaatttctg tggggtgcct tactctgcca tgtgggattt accccaacaa
                                                                     1560
ctgaggactg cagtggatag taaccatata attgctacca aaaacagtgg tccttaggtt
                                                                     1620
ttagttaagc aagagagaaa gccttgagac tacaactcca gcaagttagg ctttatgttg
                                                                     1680
atctgaaccc cccgccctca cagcattcta ggaactacag taacgtcagt cggttgcagt
                                                                     1740
ggtacaacga gcctgcacca gtctagctac ggaacacttt ggaatacttg tcagagcgca
                                                                     1800
ctggcatctg ttaatacatg gcctgaccca tgtacccatt accataaact caaccacaga
                                                                     1860
cgagacatcc agaggttaaa aaaaacccta ttacttcaac atagcaatag agagaaagga
                                                                     1920
taaaagctgc ctccagaagg tggctgcatc agaaatgaaa atgtgccttc caatagatta
                                                                     1980
cacaggctgg gagttctgtc ttggctccct tcaaggcctc tggttctatc cttaaaacaa
                                                                     2040
taatacactt ccactgagac aggcagggca ctctcctgtg gttctgctgg ctccaccaca
                                                                     2100
ggccctgcta gtcctttgga aaggccccag gcttggcaat tcaggaaagc ccagggctgg
                                                                     2160
ggggagcagc atgcacatgt cagaagagga atgaagagct gctatccttt ggttcagacc
                                                                     2220
ccataaccac cacctggtac agactccaag gaaaagctgc agttgtgtgt aaaggtgagt
                                                                     2280
tccaccacat acataggtgt atctttacat atacagcctt tgtggggcca caaacccaga
                                                                     2340
tttcctccca ctgctccaag tggggtgcac aggtggtaag aaaggacagc aagagttgga
                                                                     2400
ccaaaaagaa tgacctctct gggaacgtga gagggacaat ggcagaaata agcacaaacc
                                                                     2460
agcccggggc acttttatta cactattgtg ggctaaggag cccagggcat aaactcatgg
                                                                     2520
gtttaaagaa ttggctcttt atcaaataaa ggaaaaaaat atatatata acctatgtca
                                                                     2580
gcctcattcc tttggtcatt acaaaacaga aataaaagtt attgaaaact tgtgggcagt
                                                                     2640
tcaaggaaca tctctgcttc tctgctctgt gctttctctt ccctctttc cccagaggca
                                                                     2700
ggagaagcaa gtcctcagga gatgctgcaa gtagctggtt gatggaggtt tttcactttt
                                                                     2760
atttttcata aaagcaagaa tgaatgagaa ctagtgggaa tgtccccttc ccagctggga
                                                                     2820
caatggatgg gtcgaaggtg aagagtctct gttcactgga aggtgcgtgc acagaggcca
                                                                     2880
caggaagggt gggcttgcca agcgggtacg tttgttgcta accttgcgcg cacacacagg
                                                                     2940
ttgtgactct tacgggcagc atggtttctg atccttccta aggatgcagc agtcttttaa
                                                                     3000
aaaaaatatt gtattataat aataataata atatgaattt ctctctcttg ttttttttt
                                                                     3060
ttgacttgct gttgttttct tttttcccca tttcttttag ggactggggt aggaggggac
                                                                     3120
aggaagaaaa aaatgtcatt cgtcagttag gtcctgaaca aaaagaactt ctgtgtggct
                                                                     3180
gagtccggcc ctcctgtagc gtagggggat tgggccacct cctctgaagg gatgcagggc
                                                                     3240
agcactccgc ctgggaaaat ttggcttcaa tctgaaactt ttctggggct ttccttcaag
                                                                     3300
gagaataaga agtcgtggat tactgttaga gactgtgaaa agtggaatcg tctctctact
                                                                     3360
cgagaatcat taggtaattt gaagatgatc ttgacacttt cagggtcatc aggggaaggt
                                                                     3420
tcagggggca ggcattccaa cttcctttcc ttttcctcct gtaaattctg ccgccgtctc
                                                                     3480
tectetgeca aettttgetg ttgcacetee teettettee geegettaeg etecegetee
                                                                     3540
tecegtttet ttetttettt etectggtea getetgagag aggeeaggta ggeeteatee
                                                                     3600
tgctgttgtc tcagcacttg ggtctggttt ctttcttccc tttctaggcg ttctgacacc
                                                                     3660
aggtaagtct ggttagcatc catgataaat gtcagttggt taatgaggtc atcaggttgc
                                                                     3720
aatgaggcct tctagccgtc ccacccacag gtcattccct tcgatccttc agcataatca
                                                                     3780
tggccaggaa tggataggtg ttctctcgta aagcctgtga gaccctgtat ccctcaggtt
                                                                     3840
tgtttgtaga gcatgcccag aagagcatcc tagtgtttat tagtgaaata acttcaggtg
                                                                     3900
cacagagtgt gttgcgacaa aactcatcag agtcctggtg atcatctcca tgaagataaa
                                                                     3960
ccaaaagaaa gcgaagctcc cttttggcat cgttaagtgc ctggctgtac gttccctqgt
                                                                     4020
agaagacagg gtgtgccctc ccatatttct cttcaaaaga gtgcataaat gaaacaatgt
                                                                     4080
ccccaacggg gtcagtgacc cggctgcgag ggtcaggccg tataaaacga agagcaaacc
                                                                     4140
taaatatatc aagtatcgtg taataggtaa accggaatgg aagcattatc aagtaataac
                                                                     4200
eccatecaag cageeeett ggttgaggte ttgagacaae atagetgtag ateetgtggt
                                                                     4260
```

```
cagctgtatt aacctgcagg ggtcgtgatg gaggtgggtt gaaaacacta ggtacgccct 4320 cttgctcatt caatctgtcc tgtacagcag cctctatgtt ccagttatgc tgttccaagg 4380 tatggcgaca ctgatccata gattcgatgc cagtgagatc ctgaaactgc agcagcttct 4440 ctgtctgctc ctgggttaga tcccgctcct caggcgccgc cattttgccg ccgc 4494
```

```
<210> 5621
<211> 1719
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (412)...(286)

<223> similar to gi3249110 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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<211> 5769

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (344)...(2898)

<223> similar to gi5689541 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
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```
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cgggccggtt ccgaacgg
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<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (191)...(3290)
<223> similar to gi3882213 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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catccgcaaa ggcctcaatg cctacctgga aggttcatgg catgaagctt tqctqtatta
                                                                    2580
tgttttagca gcagaaactg gaattgaagt gtcacagaca aatttagcac acatctgtga
                                                                    2640
ggagaggcca gacctggcca ggagatactt gggtgttaac tgtgtttgga gatactataa
                                                                    2700
tttctctgtt tttcaaatcg atgctccttc ctttgcatat ttqaaqatqq qaqaccttta
                                                                    2760
ctactatggc caccaaaacc agtcacaaga cctggagttg tctgtgcaga tgtacgccca
                                                                    2820
agccgccctg gatggagact cccagggatt ttttaacctg gccctgctaa tcgaggaagg
                                                                    2880
tacgataatc ccacaccata tcttggattt cttggaaatt gactcaactc tccattctaa
                                                                    2940
taacatctcc attctccagg aactgtacga aaggtgctgg agccacagta acgaggagtc
                                                                    3000
cttcagcccc tgctccttgg cctggcttta cctgcacttg cggcttctct ggggtgctat
                                                                    3060
cctgcactca gccctgatct actttctggg aacctttctg ctatccatat tgatcgcctg
                                                                    3120
gactgtgcag tatttccagt ctgtctcagc aagcgatccc cctccaagac catcccaggc
                                                                    3180
ctccccagac actgccacgt ccactgcaag tccagctgtg actccagctg cagatgcctc
                                                                    3240
tgaccaagac cagcccacag taactaataa cccggagcca cgtgggtgaa ctgtgcactc
                                                                    3300
cagttctctc cagatgagag agaatctttt caacagctgg tattgggaag ctggggcag
                                                                    3360
ggcatgatcc tgataaacac cttaaatgtc ttgtcaactg gatgcaaatt ttgcaattgg
                                                                    3420
tgtcattttt tttaaagtca aattacaagg aagtacccag atcaggcagt ggtaatacca
                                                                    3480
aaggtcatca aacacataca aggaacatct tgatcatagg gcatgtgggg aagtttactg
                                                                    3540
ggccatcaca gacttttgtt ctagtgattg tatgtattag gagtcatagc atgccctacg
                                                                    3600
gcagatctgg attcttatac actaagatgt gtcttaagaa tcacagtgcg tgcttcatcc
                                                                    3660
ctttattgaa gaacagaaaa ttatgactac tctacaaggt ggataatatt ttggtacctg
                                                                    3720
tgcttgccac agccctgttc ctcaaagctg aattgataga tttctctttg acttccaaga
                                                                    3780
cctagcagtt ataaggcacc ttgaaataaa ttgtttgtgc ctggaaatgc agggagggca
                                                                    3840
atagetttgt aaattggttt acatttttet eettgaattt ttetagggte etagtgette
                                                                    3900
cqaatcattt aatggcattq tcggatatct tttacatttc aattgcaatc catgaaatta
                                                                    3960
catttagaag attcttagta cttaactgta gtcttctcca tgaattacac gttagaatag
                                                                    4020
actggcagca actgaatatg cagcaagtaa gcctctagct tctagcttat agtttcatcc
                                                                    4080
ctacccctca tgcctgcgtg agtctgtaca gggatatgtg tgtgtgtgtg tgtgtgtgt
                                                                    4140
tgttagagag gaagaggaag agcagaatgt ctgtatacta catgctgcta aggtagtgaa
                                                                    4200
taaatcagta atgcaatatt gtgggtccaa actactcttt gcactacttt atttacagta
                                                                    4260
gtaaataaaa ttattttat acaattg
                                                                    4287
```

```
<210> 5625
<211> 4593
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (89)...(4021)
```

<223> similar to gi559703 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5625 tttcgtcttc gcttgacgat ttcgtagggg aggaggccga gtgtttcctg gcgcattccc 60 ggccagcccg agtgactcac tcggccaagg aaactcccag ggcccgccca ggacccccaa 120 gccgccgcgg acgcagaatg tggctcagct gcccctggtc ccatcccagg gcagagctcc 180 tcctgagtac ccttgagact ggagcagatt cagcagaagg cagattgccc cctctccctg 240 gagctggctc tgaagcccag gatggcggcc caggtgactc tggaggacgc gctgtccaac 300 gtggacctcc tggaggagct gcccctgccc gaccagcagc cctqcatcqa qccccqqcca 360 tcctcgctgc tctaccagcc aaatttcaac actaactttg aagacagaaa tgcatttgtt 420 actggcatcg caagatacat tgaacaagcc accgtccact ctagcatgaa cgagatgctg 480 gaggagggcc aagaatatgc tgtcatgctg tacacctgga ggagctgctc ccgggccatc 540 ccacaggtga aatgtaacga gcagcctaac agagtggaaa tctacgagaa aaccgtggag 600 gttctggagc ctgaggtcac aaaactgatg aatttcatgt acttccagag aaatgccatt 660 gagcgtttct gcggggaagt gaggcgcctg tgccatgccg agaggaggaa ggacttcgtg 720 tcagaagcct acctgatcac actgggcaaa ttcatcaaca tgttcgctgt gctggacgag 780 ctgaagaaca tgaagtgcag tgtgaagaac gaccactcag cgtacaagag qqccqctcag 840 tttttacgta aaatggcaga tccacagtcc atccaggaat cgcagaatct gtccatgttc 900 ctggccaatc ataacaagat cacacagtct ctgcagcagc agctcgaagt gatttctggc 960 tacgaagagc tcctggcaga tattgtgaat ctgtgtgtgg attactacga gaacaggatg 1020 tatttgacgc ccagtgagaa acacatgctt ctcaaagtca tgggatttgg tctgtacctg 1080 atggatggga gtgtcagtaa catctataag ttggatgcca agaaaagaat aaacttatcc 1140 aaaatcgaca agtacttcaa gcaactccag gtggttccac tatttgggga catgcaaata 1200 gaactggcaa gatatatcaa gaccagcgcc cactacgagg aaaataaatc tcgatggacg 1260 tgcacatcct ccggcagcag ccctcagtac aacatctgcg agcagatgat ccagatccqc 1320 gaggaccaca tgcgcttcat ttcggagctg gcgcgctaca gcaacagcga ggtggtcacg 1380 ggctcgggcc gccaggaggc ccagaagacg gacgcggagt accgcaagct cttcgacctq 1440 gcgctgcagg gcctgcagct gttgtcgcag tggagcgcgc acgtgatgga agtgtattcc 1500 tggaagettg tgcaccccac cgacaagtac tccaacaagg actgccccga cagcgctgaa 1560 qaqtacgagc gtgccacgcg ctacaactac accagcgagg agaagtttgc cctagtggag 1620 gtgatcgcca tgatcaaagg cctgcaggtg ctgatgggca ggatggagag cgtgttcaac 1680 cacgccatcc ggcacaccgt ctatgccgca ctgcaggact tctcccaggt gacccttatg 1740 gagccgctgc ggcaggccat caagaagaag aagaacgtca tccagagtgt cctgcaggcc 1800 atcaggaaga ccgtgtgtga ctgggagacg gggcatgagc ccttcaatga cccaqccttq 1860 cggggcgaga aggaccccaa gagcggctaa gacataaaag taccacgccg cgccgtggga 1920 ccctccagca ctcagcttta catggtgaga accatgctag agtccctcat tgcagacaaa 1980 agtggttcca agaaaacctt gagaagtagc cttgaggggc ccaccatatt ggacatagaa 2040 aaatttcatc gagagtcatt cttctacact cacttgataa atttcagtga aacgctgcag 2100 cagtgctgtg acctttcgca gctgtggttc cgagagttct tcctqqaqct qaccatqqqc 2160 aggaggatcc agttccccat tgagatgtcg atgccctgga tcctgacgga ccacatcctg 2220 gagaccaagg aggcatcgat gatggagtac gtgctctact ccctggacct gtacaatgac 2280 agegeecact aegegeteae caggiteaae aageagitee tgtacgaega aattgaggee 2340 gaggtgaatc tatgttttga ccaatttgtt tacaagctag cagaccagat atttgcctat 2400 tataaggtta tggcaggaag tttgcttctt gataaacggt tacgatcaga atgcaagaat 2460 cagggagcca cgatccacct cccgccgtct aaccgctacg agacgctgct gaagcagagg 2520 catgtgcagc tcctcggcag atcaatagac ctcaatcgtc tgatcaccca gcgcgtctca 2580 gcagccatgt ataagtccct agaactggcg attggacgat ttgaaagtga agatttgacc 2640 tccatagttg agctggatgg cctgttggaa atcaaccgca tgacccacaa gctgctgagc 2700 cggtacctga cgctggacgg cttcgacgcc atgttccggg aggccaacca caacgtgtca 2760 gegeeetaeg ggaggateae eetgeaegte ttetgggage teaactatga etteetgeee 2820 aactactgct acaacggctc taccaaccgg tttgttcgga cagtgttacc attttctcag 2880 gaatttcaaa gagataagca gcctaatgca cagcctcagt atctqcatqq atccaaqqct 2940 ttgaacttgg cctactccag catttacggc agctaccgga acttcgtggg acctccacac 3000

```
tttcaagtca tctgccggct tctcggctac cagggtatcg ccgtggtcat ggaggagctg
                                                                     3060
ctgaaggtcg tcaagagcct gctgcaaggc acaatcctgc agtacgtgaa gacgctgatg
                                                                     3120
gaggtgatgc ccaagatctg ccgcctgccc cggcacgagt acqqctctcc tqqtatcctq
                                                                     3180
qaqttcttcc accaccagct gaaggacatc gtggagtacg cagagctgaa gacggtgtgc
                                                                     3240
ttccagaacc tgcgggaggt ggggaacgcc atcctcttct gcctqctcat cgagcagagc
                                                                     3300
ctgtctttag aagaagtgtg tgacctgctg cacgcggctc ctttccagaa catcttgccg
                                                                     3360
cgagtccatg tgaaagaggg ggagagactt gatgccaaaa tgaaaagact agaatcaaag
                                                                     3420
tacgccccgc tgcatcttgt cccactgatt gaaagactgg ggacccctca gcaaattgcc
                                                                     3480
atcgcaagag agggggacct gctgacaaag gagcgcctct gctgcggcct gtccatgttt
                                                                     3540
gaggtcatcc tgacacggat ccggagcttt ctggatgacc ccatctggcg cgggcctctg
                                                                     3600
cccagcaatg gggtcatgca tgtggacgag tgtgtggagt ttcacagact gtggagtgcc
                                                                     3660
atgcagtttg tctactgcat tcccgtgggg acacacgagt tcacagtcga qcagtgcttt
                                                                     3720
ggtgatgggc tacactgggc tggctgtatg atcatcgtac ttcttgggca gcagcggcgt
                                                                     3780
tttqctgtgc tqqatttctg ctaccatcta cttaaagtcc agaaacatga tqqcaaaqat
                                                                     3840
gagattatta aaaatgtgcc tttgaagaag atggtggaga gaattcgcaa gttccaqatt
                                                                     3900
ctcaatgatg agatcatcac catcctggat aagtacctga agtcaggcga cggggagggc
                                                                     3960
acgccagtgg agcatgtgcg ctgcttccag ccgcccatcc accagtccct cgccagcagc
                                                                     4020
tgagggcacg cgctgcactc cgtaactcaa catggcatgc ctttctctcc gtaaactatt
                                                                     4080
tagtgagatt tttagggact atttttcagt atctctgtac ctgttaaagg gggtgctttt
                                                                     4140
cgatctaaaa acttaatttt ataaaattga cttatttttc tagactaaaa ttgtatatgc
                                                                     4200
ttttggtaat taggaactct tgagaatatt ggctgctgat tgttgccatc acgttcctac
                                                                     4260
aaaattgttt ttctatggga tgttctggca gctgtgtcat aaaatgctgc tgggttcatt
                                                                     4320
cattcattcc ataagaaact taataccagc aaatgcatta aatcccttgc cagttaccat
                                                                     4380
taactataac tatttagctt ttgtttaggg atctttctga tggtctttta tgagcaatct
                                                                     4440
tagttctaag tcattgttcc catccctttt ttgtgtgttt cagaaaatag tgaacttgat
                                                                     4500
tcccctgctt ccactaaatc cagttgtgac aaaatctaac gtgacatcag atcgaaaggt
                                                                     4560
tatagaaata aaactaatga gatctaaaaa aaa
                                                                     4593
     <210> 5626
     <211> 1635
     <212> DNA
     <213> Homo sapiens
    <220>
```

```
<221> misc feature
<222> (465)...(229)
<223> similar to gil296427 in the genepept database release 114,
 Run with FASTXY 3.3t00, default parameters
```

```
<400> 5626
caaagcaaaa gcaaaaacag ctcattcaca ctttttatac tgattttata ttgaaatgaa
                                                                       60
aatattttgg atagactggg ttaaaaaaaa attaagttca cctqcttctt tttacttttt
                                                                      120
gaaatgtgac tgtcagaaaa tttaaagtaa catatgtggc tcacactatt tctgtgggac
                                                                      180
agccctgcct ctagctaggg gctttggtga gaaccagatg agttgatggg tctcctctgg
                                                                      240
gccctgcttc cctggctgct gaggtgcagg aactgtgagg ggagggcagc ctgtcacggt
                                                                      300
gcccaacaca gggcagggct ggacaggtac aagtggaaca ggcggataag ctgggaaggg
                                                                      360
cacagagaaa aggagctcct cgtgacagca ctttcccacc ttttattatt caacacatgg
                                                                      420
aagggggtgg agacacaagg atagggcaat ggtgagtttc aataaataag agaaacagga
                                                                      480
tggacaggca gtgggcccat gcctgcacgg ccccacataa ataaccaggt tgctgagcca
                                                                      540
gagtggaagt cagggctggg cctggcagcc gcctgcactg cccagaagca ctggcaccac
                                                                      600
```

```
agggacacag aaaccactga ggcccaaggt gtgctccagc cccaccaagt cttctcccta
                                                                      660
aagctcctga gatcttgggg ctggctgggc aggctagggc tctgtatcac agtcctgccg
                                                                      720
qqatcaagtc tatttttca gtttcattaa aaacagctgg gggaggggca ggcacatgca
                                                                      780
ttaagcccct tccgtaggca gagccatgga tggacagccc catgggggcc ttgaaggcag
                                                                      840
aggccctgga agcagcaaaa acggggctgg ataaagctac taatgggagg gatggtagag
                                                                      900
cccagctccc cagtccccca caacccagcc cagaacctac aaagagctga agaggccctg
                                                                     960
qqtactgaga cgtctctcct tacttcacag tcagaaaaat ggacccagcg atggccacag
                                                                     1020
atgtgcccaa gattagaacc cagggactca ctctcctagc ccaggacttt ctgctacccc
                                                                    1080
ttccctttat agacctgctg gaagaggagg gggacgcaca tctgctctag ggccctgtac
                                                                     1140
agaggcaagg gtgtggctaa ttaccaagga atggggccag gggtgacggg cacaggcccc
                                                                    1200
tcccctctgc caagcccagc ctctgatgat acagagaatc ccgtgggctc ctaggatcca
                                                                    1260
gccagggcag gcacgggggt cggggcatcc ttcaggggag caacatggca gcagggccag
                                                                    1320
gggtgggget cagectgete etgtacaeag tgecegeegg ceaectgeet eeteactggg
                                                                    1380
gcqqacgctc ccacctccag gccttqqtct ttqctqtctc qtctqctggg ccattqcttc
                                                                    1440
teggteetea cagteecage tgcageteea cetecteeag qaageetteg qaaceteeca
                                                                    1500
gggcagggcc gcagtgtcct tagactagac cgcccctcag atgaccaggt tgctctcact
                                                                    1560
tagccggacc acatagcggt tctcctcggc cttgttctct gctgggggct tcagccactt
                                                                    1620
tgtacggctt ccgcc
                                                                    1635
```

```
<210> 5627
<211> 4368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4369)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3700)...(1904)
<223> similar to gi3882187 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5627
tttttttttt ttagaatata agttttttaa tttttataaa taacttatct gttacaaaga
                                                                       60
tagtttaccc agctaaatca caaaaccatc aactcaagat atccaaatta cgttttatta
                                                                      120
ataaaacaag taaaaactga tttatcaatc ttcacataga actgcagatg aagctgaaaa
                                                                      180
acaaggccta ttttaaaaat aaattggatc aaacgtaagg gctttgggtc tatggtttaa
                                                                      240
ttacctagga ttgtcatatt tcttcccata tacaaaatgc aaagcctgaa agttagggct
                                                                      300
ctgacattca tagagatcaa ctgtaataat cccatttaaa acacagccac ttgcaaacat
                                                                      360
ttacagtggg tggtagtcta tattatcttc catcetttge tetatttcag caetteeett
                                                                      420
agececatte taageactea tataatttea taattetgte tttttaaatg cataetgtte
                                                                      480
tttttcttga tttcagttat atacattcct gatcatctga atattttcct tacaaaaata
                                                                      540
tatcatcaaa ataaagagat gcttgaggtt gcttcagtgt tcaagtttgc ttgtttttt
                                                                      600
ttccagcttt tcttcagttg tcctaaatat ggctagcctt gttttataaa tacacatgat
                                                                      660
actgtcacca agtcaggatt agaaatggac tgccccaaca gtaaagcatt taaacttctc
                                                                      720
tccaaaaaaa gggctgtagg tactgctqct qttqctqqtt ttqaqactqt actttcccaa
                                                                      780
taacaactgc ttgtgcaagt tctgtgggac accaagcaga tgaagcttaa ccttgttgtt
                                                                      840
```

ctgtcagtgg gttaaaaaata tcttttgttt taagcttccc tgtggaagac aaacactgtg 900 ttgtgtcacc cactgctcaa gtcagtattt aatgtgacct acagacatca cttctgtaat 960 atcatctgca attcactgtg cagcatctgc ctgtcttcac acaacattgg aactcatgag 1020 ggcaaagtac agaataagta gaggaaagtt attcctgtgc catactttcc acctcattaa 1080 tgctttttta ttttaaggca ttgttcctct caggtaaggc ttaaaaaggg acatgatcgt 1140 gcttaattac taaaaggaaa aaagaaaatt agttaacaaa aggctattac actatacata 1200 tagaaatata agaaaataat caagaagaaa agaaatcact taaagcagac tcgagagatc 1260 tgtacagtag gaaaagcttt ggggtatttc gctgcacatt tgtacagaca atgcatgctg 1320 ctttcctttg catctttagc ccctagatgc tggcttcaca gagtggagac acgttcaggg 1380 aagacaaaga caaggccaag agtaccacag atttctgaag ttcttcccta tccaatggca 1440 ctatgcggca gcaaatggtt cttaaatagt taaaccttgt tccttttctt cgtgtatgta 1500 gtgtttcact gaaagcttta caaataaaac aagctatcat tctattcctt cctcctgtca 1560 aaattcagta gtgacatgag gggaaaaagg tattgggaac acctaggtgt taacatattg 1620 agaattatcc ataatgggac actggtaaca ctgtacacag ttaggcagtg ggcaaccaag 1680 tctttcagca gattactttt catgtgatga atttcaactg ctcatgacat tatactgagg 1740 tattattagc tctgtgggct gacatttaac attagcagaa caccatcttg tcacaccttc 1800 aatttgacaa aatcctatgt agcagtgaaa ctttttcccg atgacagact agtttcttga 1860 actttagatg tggttttaga gaagatacag ggccatttgg ctcagaaatg ccttggcatc 1920 tcacactgtt cacagcgaat taaggctgga tggttcaaaa aagtacaggc ggtacaattc 1980 cactgagete ecteateate ttetgtgtet tgagtetttg gtgttttgat gatggaeett 2040 tgatctttgg gttttggtgg cacaggacct acaaatccaa tattgtcata aaagttatga 2100 atagcgctgg ggttaaaatg tggtcctcgg gcttgaaaaa gatcaatttc tttggttaag 2160 cagtcaatgt caatctggag ttgtctatta caacttctca gctgctgcat ttcttcaagg 2220 gaaggtatct gggatataga atttgatctt ttcaggcgcc ttcgagttag attattttcc 2280 atttcattaa cctcagattt taatttatcc agctttttct tttgaatctc aagttctctt 2340 tgaagtcgtt ccattctggc cttctggtgt accaaaagag ctcagtctac tgagtaactg 2400 ggactacagg tgtgtgccac catgcctgca taatttcaaa accttctgta gagacggagt 2460 ctccatatgt tgccccagct ggtctcaaac tcctgggctc aaatgatcct cccatcttgg 2520 cctcccaaag cactggaatt acaggcgtga gccaccatgc ccagccaaga attacttatt 2580 cttcaaatat cttgtgtgta ggcagcatca tcagatccca tactcagttt ccgtgtttca 2640 cttattctat ccacatgtgc taatgtaggg tccgtgaggt gatgaatatt ctcggtttct 2700 acataatgat caggatgatt aagaagattt gtaagttcaa aggtagggga caccaccct 2760 ggtgaaactg cagggggctt attgggagag actgtaattt tgaaagtgta ttcccgtatt 2820 gggctgagtg actaccactc gaggagaggt tgcagagtta ttgcctattg ctcgactttt 2880 gggaggatgg tgatgaataa aggcaggacc catgeteact tgeecagaca tgtteetgga 2940 ggcagcagat gctccagagt ttgtggatat gaagagtgtg ggctgattcc gcatgacctg 3000 ttcatctcct gtggcagcat tcgctgaaat atagacctta ggttgactac gggacatcag 3060 ctcatccgta tttggggggc tggcagctat gtaaacagtg ggctgatttc tgtttaaggt 3120 ctggctattg actgaagagg aagtgctgga ggttcgaggt ccagaagaac gcagttttga 3180 agaattattt ctttgtgggg gttcaagttt gatttcaatc tggttttttc qaggtcctgt 3240 tgaaatattc tgaatgttat attggctatg ggcagaagac tgtgagctac cagatgaatg 3300 aatggttggt ggttgtgaag tagtaggtga actgattggc atgtagacat gagaggtctg 3360 gtggccttgc tgatttggct gttgagatga ggtatgtgac agaggattag atgcaggaca 3420 agtagtccag ggaccaggct gtgaaggctg ataaacttgc tgagggttca tgggattaaa 3480 ctgagatacc cagccagaat gctgttgtgt ctgtcgagtt gtaccaccag gagttgtaat 3540 gtaaggccta atatagatag aatttccctg tggactgtta agtacaggtg gaggtacacc 3600 atgtatgtgc aaagatgtag gagtattacg accagtctgg atatttgggg ctaaagttac 3660 cataatggga ttaaatctgg gagtttgttg agaaaggcta gatgttcctt tgctqcctaa 3720 gtgaaatcca agatgtggtg ctgaatttga agcaccagag gaactggaca ttccaaaaac 3780 attaaagcct tgaggaactt gagctggtgc tgtctgtggc tcctgctgaa atagttcact 3840 attggactgg ccaccttgaa gttgtccatc actaatgctg tgcgttagag tcctacttcc 3900 attcatecta etecettete ttecatggtg gtaaatgtte tgtgattgea agtecaagtt 3960 gagagaagtc atgtgattgc gtagaccaga aattccagaa tcatctgaaa aattcaagtc 4020 4080 gttattatta ttctgtaaca tgcacctgga tacaacaact tcaggtactt cagggaattt 4140 ttgtcgcagg tcatgtaaaa cctgaaaatc aatttggtgg cttccttggg ccattcgtat 4200 attgcctgat caggactatt tgtacacgta cggcaattat aggccttagt ggaaatagta 4260

4320

4368

2

C

<u>\_</u>\_\_

TU

C

```
<210> 5628
<211> 2410
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (373)...(2244)
<223> similar to gi3560144 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5628 ggcacgagcc gtaggctcct tcagggctga gccatcccgc gtgtcttgcg ctcggtggaa 60 atgeecagee gagggaegeg accagaggae agetetgtge tgateeceae egacaatteg 120 accccacaca aggaggatct aagcagcaag attaaagaac aaaaaattgt ggtggatgaa 180 240 tttcttgcag accgaacaga aatgctgtct gagagcaaga atatattgga tgaactgaaa 300 aaagaatacc aagaaataga aaacttagac aagaccaaaa tcaagaaata gtcaacctga 360 tttcacataa caatgtgtgg catttgttgt tctgtaaact tttctgctga gcatttcagt 420 caagatttaa aagaggactt actatataat cttaaacagc ggggacccaa tagtagtaaa 480 caattgttaa agtctgatgt taactaccag tgtttatttt ctgctcacgt cctacacttg 540 aggggtgttt tgactaccca gcctgtggaa gatgaaagag gcaatgtgtt tctatggaat 600 ggagaaattt ttagtggaat aaaggttgaa gctgaagaga atgacactca aattttgttt 660 aattatcttt cctcctgtaa gaatgaatct gagattttgt cactcttctc agaagtacaa 720 ggtccctggt catttatata ttatcaagca tctagtcatt atttatggtt tggtagggat 780 ttttttggtc gccgtagctt gctttggcat tttagtaatt tgggcaagag tttctgcctc 840 tetteagttg geacceaaac atetggattg geaaateagt ggeaagaagt tecageatet 900 ggacttttca gaattgatct taagtctact gtcatttcca gatgcattat tttacaactg 960 tatccttgga aatatatttc tagggagaat attattgaag aaaatgttaa tagcctgagt 1020 caaatttcag cagacttacc agcatttgta tcaqcqqtaq caaatqaaqc caaactqtat 1080 cttgaaaaac ctgttgttcc tttaaatatg atgttgccac aagctgcatt ggagactcat 1140 tgcagtaata tttccaatgt gccacctaca agagagatac ttcaagtctt tcttactgat 1200 gtacacatga aaggaagtaa ttcagcagtt cattgatgtc ctgagtgtag cagtcaagaa 1260 acgtgtcttg tgtttaccta gggatgaaaa cctgacagca aatgaagttt tgaaaacgtg 1320 tgataggaaa gcaaatgttg caatcctgtt ttctggggggc attgattcca tggttattqc 1380 aaccettget gacegteata tteetttaga tgaaccaatt gatettetta atgtagettt 1440 catagctgaa gaaaagacca tgccaactac ctttaacaga gaagggaata aacagaaaaa 1500 taaatgtgaa ataccttcag aagaattctc taaagatgtt gctgctgctg ctgctgacag 1560 tcctaataaa catgtcagtg taccagatcg aatcacagga agggcgggac taaaggaact 1620 acaagctgtt agcccttccc gaatttggaa ttttgttgaa attaatgttt ctatggaaga 1680 actgcagaaa ttaagaagaa ctcgaatatg tcacttaatt cggccattgg atacagtttt 1740 ggatgatagc attggctgtg cagtctggtt tgcttctaga ggaattggtt ggttagtggc 1800 ccaggaagga gtgaaatcct atcagagcaa tgcaaaggta gttctcactg gaattggtgc 1860 agatgagcaa cttgcaggtt attctcgtca tcgtgtccgc tttcagtcgc atgggctgga 1920 aggattgaat aaggaaataa tgatggaact gggtcgaatt tcttctagaa atcttggtcg 1980 2040 tgttgtctcc tttctaaatt ctctgccgat ttgggaaaaa gcaaacttga ctttaccccq 2100

<210> 5629

```
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```

```
<211> 2102

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1760)...(663)

<223> similar to gi4406590 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5629 ccttcccggg gcttgggaat gttctgagcc cagcttcctg tcgaagaccg ccatcttgct 60 cctacgactc ctggtcaccg tggtcccggg cccttctctg aaaaggggca tccccaqccc 120 ggagcgtgat ggaccaatgc gagggcctga gcccgagggt gcggacagta aaccgtttat 180 tactgtgtgg acacagacac cgtggtgcat gacagacagt ttcaacacca tgagcgctgg 240 ggacggaget gtgcctggac agetetgegg tgtgtggtgg egecaegetg ggeeggetgt 300 caccgccage tgaggcgcta acagcgtcac ctgggagaaa acctggaaac cgtctaatga 360 agcaggtgac ttaggggcgt ctctagaaac ccaaagaaat gtaccttaaa taagcaaata 420 taaaacacaa aaaagacgag cagacctggt gttccgtgtc aggcagaatc taaaaaaacc 480 caggagttgc acttggtttc ctcactgtca tgtgtgatca caggtcagga cgtttcacag 540 cagcgcgccc aggctcctgt gcgtgctctg gtgcactgga gtctggggct ggctgggctt 600 ctggctgtcc tctgtcgccg gatgggctcg acgaatcagc gcagcgaggc cggccctta 660 egtggtgetg atcccactca getectgeet gatggegteg atgateteet cetteacett 720 gtggagctct ctcaccacct cctctaggat ctcctgcttc atccggtcca agtcgaaggc 780 atccagggcc atgtcattca cgctcccagc aggcttcatc ctagagtgag gctgcgactg 840 aagggggctc ttagcttcgg ggctctttgc cacagacggg gttctggaca gaatcgagga 900 cacaggette tecacegagt tgeteegete ecagggette eggeeageet etgaggagtt 960 aggtggctgg ctggctgctc gggtccccgg agagggggag gtactaggat cttccatttg 1020 gctttcatct tccttcttct cggctggctt gtctgactgg gaggctgctt ttctcctctt 1080 ggccagcagt ttgttcattt cctccatgag gcctcctccg ccacccccgc tgcttgcccg 1140 gttggcatcg gactttgagg tcccactggg actggagcct ccagatgcgt cttctggccg 1200 ttggactctt ctcagcttgg cccccagcta atggcaagcg gccagtcctg aacatggaag 1260 ctctcgtcgt ggctggaccc cctgggcttc ctccggctgg caagtggggg tgggggggt 1320 ggggtaagcc ccagtgggtg gaggtgggac tgggggtggg gggggcggtg gaggcccact 1380 acatgagacg ggggcgctgg ctgcagatga aggatgtcct ggtgggagga tgggccctgt 1440 ggccgaggtt cttctttcta gagattcctg acgctgctgc tggtgctgct ccatcacttg 1500 tettetetgg atgtecatet cateaggaga ggggeeatte tgeacetgae getggetgga 1560 ggggcctcct tcttgggaat tcatgatgtt cagggcaaac agcattgcat tggagaacgt 1620 ggttgcctct tctttacttg caaagtttaa gccgtagacc tggcgggcat ctcgccactg 1680 gtggaaggtt ggcgtggcct gattgtactt cagccctttc acgattgaat aattgatcac 1740 aacctgctga tcctgcaact tgactccaac gactctgaag gtgttgctgg cagtgttgtg 1800 gtagatgttg atccggctga atccctgctg gccaggtttg attggtaccc atttcttact 1860

```
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```

```
<210> 5630
<211> 4790
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (4607)...(903)
<223> similar to gi5912263 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5630 gaggagaaaa gaaagattta taattaaata gtatttaggg tcccaatagt cagagtccaa 60 taatccaaag gtcatctatg caaaattagg aatatgcatt tttctccaaa gagtatcttt 120 ggctttaatc tgattctcaa aaggatccta tgatccaaga aagtttaaga accattgaaa 180 cagtaattta ttcctgagct atttgactgc catcaatcca tttgttataa aactgaaggg 240 aaaacacaca tttgaatcac ttcttctaaa gctttagtaa gtgatctgtt caaataagca 300 attacatgaa agaataaaac caaatttcca acctaaaatt ctgacaggag agtcaacatg 360 atggttaagg cctatttcat attcaaactt cagtctatga aagagtagag agagaagggt 420 ctcctctttc aaattaaata ttataaaaac aattaaaaaa aggtatcaat agtcctaaaa 480 tqcaqcaact ccatctcaaa caagcatgac acacttctga tcagatgaag tatttacaaa 540 ggtagcttgt gttttaagca tgtaacactt tgggtgacga cagaagtttc tcctctttgg 600 gtgaaacctg cctaaggctg tagagatgac caacactctg caggtgttag ttctgaataa 660 ctactgtggg cttttcatga tcttccctcc agtaggagac cacaattgag tctaaagtca 720 gatccaccgt tgtctatggg taggcagggt tgattcaaac ttaatccttg tttgtattct 780 tttggattac tgcaaaaaca tctagggacc agagtgaatg tctggtgagg cataactgca 840 gaggtgaaag atgtcaaaca ttttcaattt ggcagtttct tcaaggtgtg tgaaaattca 900 catacagaag gtctggcagt gtcttctgta agttttcgtg ttgccgtatt tctgaaggag 960 ctcttgggcc tgctgctgca tttcctgggc cagacagcca ggaaagtggg acctgatgag 1020 aagcaggacg aggcagcact ccagcacatc tgggaagggc caggccttaa tgctctcagg 1080 aaattttgcc attctctgat ttgcctcggt aagccttttg gttaactcag gcagagaaag 1140 tggctcattt ttttcttctt tacactggct ctgagaactg cagaggggct gctctgcttc 1200 tacttccggt tcattcttat caggaccatt tgctgtggat ttacagagtt gactcttttg 1260 gtgttgtcgg atcatttctg ccaaggtctc ttggacttca gcaacagttc tctgtgagtt 1320 ttggagactg gcatgctttt ctgaaaagag ctccttaaaa gtactcagca ttcgctcccc 1380 ttettetgtg agteteaagt etagttetga aggeetgttt ggetetgget gagaagttte 1440 agggtccgtt tcttcagtgc tggcagtgtc taactgctgg cttggctcaa cagagagtgt 1500 tctgtgacca gcccttaccc agacactgga atttgggcaa ggtctggaga gagaccacca 1560 gaattcatac agacgcccat aaagaaaaaa ggcctccaaa cttttgaaag ctqqtqtqqc 1620 aggggattga tggtccccca acttgtctct taggtggtca cagccatcag ggagaaaggc 1680 tgagtacact tcctgcatga tggtgaagct ccctgagtca tagctccgga ccaccgcccg 1740 aaggagcgcc tgcacagcct cgtcccagga ggccatctgt tggctcagca ctgccagggt 1800 caagtcatgg caaatgtgaa gcaggagctg tttggcaggt gtgttatttg tagcagatgg 1860 gtacttgatg ttctgcagct tctgaaaggc ttcctgatac tqctcaqqqq tqtcaaqqct 1920

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<sup>&</sup>lt;210> 5631

<sup>&</sup>lt;211> 4079

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

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<220>
<221> misc_feature
<222> (248)...(3126)
<223> similar to gi6002669 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
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<400> 5631 accggatgga gttccgggtc gacccacgcg tccgggctgc agcagcgcat tctggggcat 60 ggttcggcgg gggcgcggag ggctcggttc ggagggggcc gggagcccgg qcqccctqqa 120 gtgaggagga ccgggagctg gctctggagg ctgcggaggc gacgccggag agaacgaagc 180 ctcggctggg agcggatctt tcgaagatgg tttggctgcc ttggagattt ggagatctga 240 tgccacgatg aggactcaca cacggggggc tcccagtgtg tttttcatat atttgctttg 300 ctttgtgtca gcctacatca ccgacgagaa cccagaagtt atgattccct tcaccaatgc 360 caactacgac agccatccca tgctgtactt ctccagggca qaaqtqqcqq agctqcagct 420 cagggctgcc agctcgcacg agcacattgc agcccgcctc acggaggctg tgcacacgat 480 getgtecage ceettggaat acctecetee etgggateee aaggaetaca gtgeeegetg 540 gaatgaaatt tttggaaaca acttgggtgc cttggcaatg ttctgtgtgc tgtatcctga 600 gaacattgaa gcccgagaca tggccaaaga ctacatggag aggatggcag cgcagcctag 660 ttggttggtg aaagatgctc cttgggatga ggtcccgctt gctcactccc tggttggttt 720 tgccactgct tatgacttct tgtacaacca cctgagcaag acacaacagg agaagtttct 780 tgaagtgatt gccaatgcct cagggtatat gtttgtaacc ttaatactag gcgcggatgg 840 cgattcaaat acctgcacaa tcatcagccc accaactgta tggctttgct cacgggaagc 900 ctagtcctga tgaatcaagg atatcttcaa gaagcctact tatggaccaa acaagttctg 960 accatcatgg agaaatctct ggtcttgctc ggggaggtga cggatggctc cctctatgaa 1020 ggagttgcgt atggcagcta caccactaga tcactcttcc aatacatgtt tctcgtccag 1080 aggcacttca acatcaacca ctttggccat ccgtggctta aacaacactt tgcatttatg 1140 tatagaacca tcctgccagg gtttcaaagg actgtggcta ttgcggactc aaattacaac 1200 tggttttatg gtccagaaag ccaattagtg ttccttgata aatttgtcat gcgtaatggc 1260 agtggtaact ggctagctga ccaaatcaga aggaaccgtg tggtggaagg tccaggaaca 1320 ccatccaaag ggcagcgctg gtgcactctg cacacagaat ttctctqqta tqatqqcaqc 1380 ttqaaatcqq ttcctcctcc agactttggc acccctacac tgcattattt tgaagactgg 1440 ggtgtcgtga cttatggaag tgcactacct gcagaaatca atagatcttt cctttccttc 1500 aagtctggaa aactgggggg acgtgcaata tatqacattg tccacagaaa caaatacaaa 1560 gattggatca aaggatggag aaattttaat gcagggcatg aacatcctga tcaaaactca 1620 tttacttttg ctcccaatgg tgtgcctttc attactgagg ctctgtacgg gccaaagtac 1680 accttcttca acaatgtttt gatgttttcc ccagctgtgt caaagagctg cttttctccc 1740 tgggtgggtc aggtcacaga agactgctca tcaaaatggt ctaaatacaa gcatgacctg 1800 gcagctagtt gtcaggggag ggtggttgca gcagaggaga aaaatggggt ggttttcatc 1860 cgaggagaag gtgtgggagc ttataacccc caqctcaacc tqaaqaatqt tcaqaggaat 1920 ctcatcctcc tacatccaca gctgcttctc cttgtagacc aaatacacct gggagaggag 1980 agtcccttgg agacagcagc gagcttcttc cataatgtgg atgttccttt tgaggagact 2040 gtggtagatg gtgtccatgg ggctttcatc aggcagagag atggtctcta taaaatgtac 2100 tggatggacg atactggcta cagcgagaaa gcaacctttg cctcagtgac atatcctcgg 2160 ggctatccct acaacgggac aaactatgtg aatgtcacca tgcacctccg aagtcccatc 2220 accagggcag cttacctctt catagggcca tctatagatg ttcagagctt cactgtccac 2280 ggagactete agcaactgga tgtgtteata gecaceagea aacatgeeta egecacatae 2340 ctgtggacag gtgaggccac aggacagtct gcctttgcac aggtcattgc tgatcgtcac 2400 aaaattctgt ttgaccggaa ttcagccatc aagagcagca ttgtccctga ggtgaaggac 2460 tatgctgcta ttgtggaaca gaacttgcag cattttaaac cagtgtttca gctgctggag 2520 aagcagatac tgtcccgagt ccggaacaca gctagcttta ggaagactgc tgaacgcctg 2580 ctgagatttt cagataagag acagactgag gaggccattg acaggatttt tgccatatca 2640 cagcaacagc agcagcaaag caagtcaaag aaaaaccgaa gggcaggcaa acgctataaa 2700 tttgtggatg ctgtccctga tatttttgca cagattgaag tcaatgagaa aaagattaga 2760

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                                                                     3840
aagtgagatg attacagata acttaatact gtattttcct tatatggaaa accgttatag
                                                                     3900
acccaataac aactaaacct ttcaaaagaa aatattttct attatgaatg ttgattttca
                                                                     3960
taccaaagaa qatqqagagt ctaaaatttg gatatgattc ttatgttttt ttaatagaaa
                                                                     4020
accttcttca agtttatttt cctaaataaa catcataatt gtgaatttta aaaaaaaaa
                                                                     4079
```

```
<210> 5632
<211> 2276
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (116)...(15)
<223> similar to gi5080758 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5632
taattgggag aatactccag ccataagatc tgcatgcata qcataqcact qqcttctctq
                                                                       60
gactttgcac acctccagga gaagaaccca gaaaattgat cagttctaaa aaaccatgcc
                                                                      120
ccacttgttg gtgactttca gggatgtggc cattgacttc tctcaggagg aatgggaatg
                                                                      180
cctggaccct gctcagaggg acttgtacag ggatgtgatg ttggagaact acagcaacct
                                                                      240
gatctcattg gacttggaat ccagttgtgt gaccaaaaag ttatctccag aaaaggaaat
                                                                      300
ttatgaaatg gaatcactcc agtgggagaa tatggggaaa cgtatcaacc atcacctttc
                                                                      360
aatacaatgg tcttggagac aatatggagt gcaaaggcaa cttagagggt caagtaagca
                                                                      420
agtcagaagg gctttacatg tgtgtcaaaa ttacctgtga agaaaaggcc actgaaagtc
                                                                      480
attcaacctc ttctactttt catcggataa ttcctaccaa ggaaaaattg tcaaatgtaa
                                                                      540
ggaatgcaga caaggtttca gctacctgtc atgccttatt caacatgagg aaaatcataa
                                                                      600
tatataaaaa tgctctgaag ttaataaaca caggaatacc tttagcaaaa agccaagcta
                                                                      660
tatttaacat cagagaattc agactgggtg agaaacctta tgagtgtatg gaatgtggaa
                                                                      720
aggcctttgg tcgtacttct gatctcattc aacatcagaa aattcatact aatqaaaaac
                                                                      780
cttatcagtg taacgcatgt gggaaagctt ttattcgtqg ttcacagctc actgaacatc
                                                                      840
agagagttca tacaggagag aaaccatatg attgtaagaa atgtggaaaa gcctttagtt
                                                                      900
```

```
attqttcaca atatactctt catcagagaa ttcatagtgg tgaaaaaccc tatgaatqta
                                                                      960
aggattgtgg gaaggccttt attcttggct ctcaacttac ttaccatcag agaattcata
                                                                     1020
gtggtgagaa accttatgag tgtaaggaat gtggaaaggc ctttattctt ggttcacacc
                                                                     1080
ttacatacca tcagagagtt catactggtg aaaagcctta catatgtaaa gaatgtggga
                                                                     1140
aagccttttt atgtgcctcc caactgaatg aacatcagag aattcataca ggagagaaac
                                                                     1200
cctatgaatg taaagaatgc gggaagacct tttttcgtgg ctcacaactt acttaccacc
                                                                     1260
tgagagttca ttcaggtgag agaccttata aatgcaaaga atgtgggaaa gcctttattt
                                                                     1320
ctaattctaa tcttattcaa catcaaagaa ttcataccgg agagaagccc tacaaatgta
                                                                     1380
aggaatgtgg aaaggccttt atttgtggca aacaacttag tgaacatcag agaattcata
                                                                     1440
caggtgagaa accetttgaa tgtaaggaat gtggaaagge etttattegt gttgcatate
                                                                     1500
ttactcaaca tgagaaaatt catggtgaga aacattatga atgtaaggaa tgtgggaaga
                                                                     1560
cctttgtacg tgctacacaa cttacatatc atcaaagaat tcatacaggt gaaaagccct
                                                                     1620
acaaatgtaa ggaatgtgac aaggccttta tttatggctc acaatactta gtgaacatca
                                                                     1680
gagaattcac agaggtgaaa aaccttatga atgtaaacag tgtggaaggc ttttattcgt
                                                                     1740
ggctcacacc ttacgaacat ctgagaactc atactggaga gaaaccctat gaatgtaagg
                                                                     1800
aatgtgggag ggcctttagt cgtggctcag aacatactct gcatcaaagg atccatactg
                                                                     1860
gtgagaaacc ctatacatgt gtccagtgtg gtaaagactt tagatgtcct tcacaactta
                                                                     1920
ctcaacatac aaggetteat aattgagaaa geettgaatg tgattaaatt taagaaaate
                                                                     1980
ttcatctatt tcatatctat aatgaatgta gaacatcttg cttctgctca gaactgctca
                                                                     2040
ttcttagaag gcctacttaa catggatgca gaataatttc agaaacccct taaataattc
                                                                     2100
cttaacatct ctataaacgc tagaatataa tgctgaatta tatcctttat taagcatcat
                                                                     2160
ctccatttca ccatatccta actgaaaccc tatatatttc ttgtgtgttc ttttctattt
                                                                     2220
gtaaatactg taattgtatt acatgactaa attatattaa tactataatt ccccqq
                                                                     2276
    <210> 5633
    <211> 795
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (292)...(12)
    <223> similar to gi809078 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
    <400> 5633
taatctatga aatttcggtt ttaaaaaatg tgttaagtct ttgtttttgg cctatcaggt
                                                                       60
ggtttataaa gaagaatgtt gaatgagcta ttgagaaggc tqtgtatccc qatgttgttg
                                                                      120
```

```
aggagtgttc tctatacctt cattagaaat tattgttttt gactgccttt tagtcctctg
                                                                180
ttcccttact aatatcatct tgttttatta ttattacaga aagtggggta ttgaaatatc
                                                                240
ctactataat tatattgctc tattcaactt tgttagtatt tgctttatat atttgaaacc
                                                                300
ccaatttgag acacacac gcacaaatac acacatggat aaacaaattt gtcataggtt
                                                                360
tccatgaatt aatctatata ttgtttaatg tccttctttt ttgaagtttt aacttaaagt
                                                                420
acattttata aaatatgaca gcttttgact ttaacaatgt agcttgtgta atattatttt
                                                                480
gacctettet geteteattt tgttagtatt tacatgaaat ttetaettgg tettgeeact
                                                                540
ttcagtcttt tcttatcatt agatctcagc tgactcttgt aaaaaggcaa gttgagtctt
                                                                600
gatttttaaa attttttaat gagccttttt agaagtatgt ctcttgattq qaaaqataat
                                                                660
720
tcttgtatct ccgtgtctta atttctcctt tataagtttt ttttataaat gtgttgacat
                                                                780
gctttgagct ttttt
                                                                795
```

```
<210> 5634
     <211> 4570
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(4571)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     \langle 222 \rangle (454\overline{5}) \dots (329)
     <223> similar to gi36110 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5634
tttttttttt ttgctacaat ttgtgcttta atagtcattt gttcctttat tggttcaagg
                                                                        60
gtcagtgttg gtgtggtcac tgctgagtcc actgtgccca gaagacaggg tccacagcag
                                                                       120
gcactccata aatacatgtt gcaggactgc cctcactggc tcactctgtg gagtgaggga
                                                                       180
cctaatgggc cccatttacc tattgcctct gaaagttaaa gggcaggaac aaggtggagg
                                                                       240
gecactgeee tetggeetgg catggeecag aggeagettg gggttagete aaggeageta
                                                                       300
agcaggtcca gcccaagaac taagtcaagt gggccgagga ggctctgaga gtggccgggg
                                                                       360
cccngcgtac aattccctgg catggggtga gaacgggggc tgttctggac gcacattcca
                                                                       420
teteatgega getgetgggg eccaagttee atgtagggtt getggeaget geacataatg
                                                                       480
ggtccccaag gaagtgagga cactatctgc tccacctccc cccactagta cttctgaagg
                                                                       540
tgggtcgcac ttgctgggtc tgcctcccag cattgctgca tcacttggta cagagaatca
                                                                       600
aggcaatact caggctgggg caggcgccga ccctggggcc cagaaagtgg gtaaggtcaa
                                                                       660
aagggtcaat gtggcggtat ggtggggcac cccgtgtcag cagttcccac agcagcacac
                                                                       720
caaatgacca cacatcagac ttggtggtaa atctataggt ctgcaggctc tccagcgcca
                                                                       780
tecaetteae aggtaggega gegtggegat getgttgaae actatagtae tecetgteea
                                                                       840
ggatgtcgcg ggccaaacca aagtcagcca ccttgactgt gaatgactcg tccagcatgc
                                                                       900
agttccgcgc agccaggtcc ctgtgcacaa acttctgctc tgccaggtac tccatgccgc
                                                                       960
gggctacctg caggccaaag ctgatgaggt ccttcacggt ggggttccqc tqaqqtqaqc
                                                                      1020
ggatgaactg gagcaggtca ccgtggcaca tatagggcag caqcacatgg ggcaggccct
                                                                      1080
caggtggcaa catgatacca atgagagcca gcacattcgg gtggttcagg ccacgcatga
                                                                      1140
geageceete tegeaggaag geeteeacet getgeatete tgtgatgega ettagtgaet
                                                                      1200
tgatggcaca ttggattcga ttctgggcct ggtctatgta ttctccgtgg tagacaactc
                                                                      1260
caaagtggcc tcagccaatg actcggtcac tgtgggtgac cacccgctca tggggaatca
                                                                      1320
gcaacatcct tgacctcaag ccaagagcgc agagtccagg tcccttagct ggatggactc
                                                                      1380
tttccgcagc agtggcacac aggattcatc ttcactatcg gagaaggatg ctccatggac
                                                                      1440
acaagtggtg gaatccagac catcaatggc agggagtgca aggccacttc tgtagtcaga
                                                                      1500
gcccgagtac agaataggca ggggtgtggc tccagcagtc tggtccaggg atgccaggtc
                                                                      1560
attcaggttg ggaggaagaa ctagctgctt cctccgccac cagtagctga agaccagtqc
                                                                      1620
agtcgccagt gcagccacaa gcagcagcaa aggcagcagg ataccaagga gcgtgctctg
                                                                      1680
tgggacccca tctggccctg gccgcaccac tctacccagg atatgacatt caccatctac
                                                                      1740
gcagacctgc aatggggcac catcctggcc aagctgcagg gatgggggca gggggcagac
                                                                      1800
```

1860

1920

aaccatgtcc ccccggaact cgtgctggca gctctcacca cccacggtca cgttgatacc

cacacagtca gccacagcgc ccagcccaat atactcaaac ttaatggcat gctcctcagg

```
cttcagtgga actaggttgg cactgggtgg atggggtggg ggtaggaagc gaaagccagg
                                                                     1980
cagtgtaaag ccagcagctc catccctcg ggcactcaga ttccctgcca cccatcctg
                                                                     2040
ggggtctcgg accacatatt caggaaggcg gcacagctgc tgctctggaa gctgcctctc
                                                                     2100
acacctgctt tccactgccc taagcccgtc atggaatgac agcactaagt gccatgctga
                                                                     2160
agttagatgc tggccacaga tggtgatgtg ggagttgatg tagccacagt tggggctgat
                                                                     2220
gcttagcacg acagggtctt ctctgtactg gaaggtccag gaaccaggta cctgggcacc
                                                                     2280
ccccacctgc aggctaaggg ggacactggc caccgtggcc ccagggggtg tggcacataa
                                                                     2340
aagctgcccc tcactgaccc gtgctagcag acactcagtc ccattgacca gcacagcccg
                                                                     2400
gctggtgcct acagacagac tctggccttc aagaqtgaga caggtgcctc ctgcccgtgg
                                                                     2460
gccaaagagg ggttgcactg ctatcagcac tggctccatg aaagagaagc ctctcagcac
                                                                     2520
ggaggtgccg tctacccgga agtgcttgcc cggtggcatg ttagtcacgg tgaqqctgac
                                                                     2580
gttggtaggc cccactgcct gggtgcccaa gggctccagt tcacactcaa actcctctac
                                                                     2640
aaagtctttc cggggcactg gtctgagttt tgagctgtcc ttgggcagtg gccggcaggg
                                                                     2700
actttggccc acagtgacct gatgggttcc ctcaggcacc agaccagaag ggtgaaggta
                                                                     2760
gaagttggag ccacacaggg tcagccttgt actgcccctt agaggtccac tgtgggggtg
                                                                     2820
gaactcagta agcttaggtg ggcagtggtc ctgttgccag gagccaggac actccttctq
                                                                     2880
ctggccgcac atgttcccac accagccaca gcccatgaaa tgccatgccc ttaggcaacg
                                                                     2940
cccacaggtc aggaagtggc ggcagccagg gcctcggata ggtacctgga aaacctqgtc
                                                                     3000
cccagaggca aagagtaggt ggtccccaag acqactqaca tcccqctqca cgggctqccc
                                                                     3060
actgtcaccc agtgagaagt tggacacata cagcaagtag tttagtgacc tgaccagctc
                                                                     3120
cacctgcagg atacgcccat ccattgtgcc catgtgtgcc actgtgacgt tqtcaaqqcq
                                                                     3180
tgtcacatac aatgcagtga cctgtactgg tcccaacagc ccattgaata ggtccacacg
                                                                     3240
tgagaagctg ctactgacca gcagagggaa gtggcggcag ctggtgttgg ggctgagggc
                                                                     3300
ttccaggcca ggcgggttgg ggcaaaaact gggcgactgg aagaagtcga ggcctcqccq
                                                                     3360
gaggcctgga tggactgggg attcacaaca gcgctccaca ccctcatcaa ttagtgtgtc
                                                                     3420
cagcaggtca atggggaagg cacagacgac agagttgggg cccacgccag gaccaccatc
                                                                     3480
cttgccagtc acaaagaccc caaatagtac ttcctggccc tcggcgatgc tcagctcagt
                                                                     3540
ggcaagttgg gcacccactg gagcggagtg ggccacctgc agcacagggt agggctqtcc
                                                                     3600
gccttctggg gcccccggc gcctgcgttt tggagcaaat ctgcagtcga ggaccagctc
                                                                     3660
ccgatagtca cccaactctg gctcagtggc gctaagccgt gccaggcgtg tgtgcagggc
                                                                     3720
actaggatca tctgtcacgc tggccggctg tacagtcagg aagtatacga aggctcccgt
                                                                     3780
gtggaagctg tgcacgtatt caatactgta ggagacaaga tgcttgggca gcactgacaa
                                                                     3840
cgccacaaag cccggtgcga atcccgaggc gtcagccttg agacgcctga tagacactga
                                                                     3900
gcgtgggctg aagctgccag ccacggctgc gtccagtgag gatgccacgt agaaatagga
                                                                     3960
ggcctggcct tgctcaacca cagttacacg qqtqcccaat qqqctqqcca cacaqtcqqq
                                                                     4020
gcagtcatcg ggccggttat ggtgggctga gaagaggcag gctggcgctg ccagatgcac
                                                                     4080
ggctgtccct tggggctcta ggtcatgcag gaagcagcgg ccctgcaggc tggagccaca
                                                                     4140
actgaccage geaggeageg egggatecag caccageace titiqtqtetq tqteaceqqq
                                                                     4200
agggccgtgg ggtcctgggc cacaggctgc acacgtctgg cagccagggt ctccagcagg
                                                                     4260
gcccgtggcc aggctctgga cagacttcag gtcaggccca agcacatgca ggcgattgcg
                                                                     4320
tatggctaca aacacagcac tctcatttct gtcgccctcg taggtcacca tggcctgtac
                                                                     4380
caggeeteeg geggagaage tgggeaceae gtaetteaeg teaaagtege gagaggeege
                                                                     4440
gtagggggtg cgcgggcact gccagtcctc gcccgccgcq qqcttqqcaq qcaacaqcaq
                                                                     4500
cagcaacagg aaggactgag gcagcggcgg gaggagctcc atcgaggcga gctgggaccc
                                                                     4560
tagaggatcc
                                                                     4570
```

```
<210> 5635
<211> 1949
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1813)...(335) <223> similar to gi4309889 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5635
ttttttttt ttaaaaactt ttaacaattt attagtctta ttttccagta aaatattcac
                                                                     60
agagatgtca aaagaatgag atggtgagcg atatagccaa ctacctttaa ttaattccac
                                                                    120
ataaatagtt aagatctaaa aacctcagat gagcagaccg agtcgaaatg tgattcttca
                                                                    180
aagcaagtat tgctttaccc tgtgtcctgg aatgcagtcc gtcgatatga ccactaactt
                                                                    240
gcatgtgacc aaatgtttgg agagtgtttt ttaggatatg gctctcgggt gaggccggtc
                                                                    300
atcccgtcaa tccaaggaag gaaggatgtt gttggaactg cggttggcac caaggtttct
                                                                    360
tggacctctt tcattttact tccaatcagg gtttggcatt ttttttggat ttcaaaatta
                                                                    420
acataggggc tcccggccgg atcagacttc ctttccaaca accccagtaa tcactcaagg
                                                                    480
cccttcaaca atgatctccc tcatcttcca cccactctgg ggtaaaggtc actgttggat
                                                                    540
ggtcaccgag gaatcttcat ttaaatccgg gtgcacggaa gtgagcggac acgctggggc
                                                                    600
gttttcctca tgtgaactgt gctcttctcg gcgagattca tgtggttgaa gtagataaac
                                                                    660
ttaaactggg gttcctttcc tcagaccccg gaacatcccc cttgttgatg ttaaaactgt
                                                                    720
tccacaagat gtccagaggc ccagccactg tgaagctggg gccccaacga tgctgtccca
                                                                    780
gtccttcggc aaaaaaccca acgttgggtg gacagaggcg tcgatcataa agcacacagc
                                                                    840
cgcactcatg gccttataaa cggattaaat ggagctcttc ataagtgtca tctgtattta
                                                                    900
caaaaatttt ggggaatctg cattttgcat ctggatcatt gaggttcaag ggtccggtaa
                                                                    960
gaaatcttcc atagtgttga agatttcctg gcatttctgc tcttattqqa qaatcccttc
                                                                   1020
ctgctaactc aggttcggat gtgccttggg aaaagggagg tggtaaggta tttgtataaa
                                                                   1080
attctcatgt catcttgttc taatccactc cagatgagct gatcqttata gagaaaagca
                                                                   1140
gtgtatttga ctatattcag gctttcctcc attcgtatta ataaaggact ggattttcaa
                                                                   1200
ataagtcatt ttatccaacg ggaagaagct gattccacca aaaatgtcaa gtaggtcaca
                                                                   1260
tgactgcaaa tgtagcgttt gcaaataccg atggaagaat ttctctaatc tttctttcag
                                                                   1320
aagcttgacg cctccgtctt ccatggcttt caggaaatgt accattaaaa agcttgtaca
                                                                   1380
tgctgtagca ctgccgcagc accgagctat aaaccttgtc caacaactcc tcctcttgga
                                                                   1440
tattcaataa ctggttttcc atctttactc tgtttttcaa ttataggaca ccgaacaacc
                                                                   1500
atgaccatcc aagaaatttt cttctggttc aattgaagaa ctgtctgttc ttctgtgtat
                                                                   1560
gtaaagattt tgcaggtttt gatgggctaa atgtccttgt aaactgtaca atagcttcac
                                                                   1620
1680
tettatttte eteetgteet tegegeggee egaagegegg gttgtagatg aagaaactea
                                                                   1740
gcagcgccgg cgggaactgc ttctcctggg ccgcccaggg cccgctcccg gccccggccg
                                                                  1800
tegetgeget geagecatee tggeeeggee eccaecteag gaagecteee acggeeegee
                                                                  1860
cagagaccga gaaaatctct taatttcagt ggaactcagt ttgtttctct ttttaaacat
                                                                  1920
tgccagttat aaatgtattt tattttaaa
                                                                  1949
```

```
<210> 5636
<211> 947
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (290)...(191)
<223> similar to gi2276308 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5636
attetatece ggtecacagt ttaggaacca tggacaaaag tecaaggace agaggeatgg
                                                                     60
agttttcatt agaaggttct gaattcatct aatggctggt tatttttaca gatgccaagt
                                                                    120
ttacaaaaca tacaagtgca cagacaggtg tgggaggtag ctcgaaatat acaqagtgtt
                                                                    180
cgcaacacta gagacgtctt ctggctgcca tcaggggact cggaggtagg gtaggcttgg
                                                                    240
tgaggcccgt ggcttgtgtc cgtggcacag cctcctgcaa aggggctgcc ctgctcccct
                                                                    300
gttcccatgg tgccaggccg tgctccccag gtgcctccgg ggtgctgaag atcttttcat
                                                                    360
agtactcgat cagcagttca gtgaacatgt tcaggggcac aagggcactc agggaggaga
                                                                    420
ccccctggga tggccagatc aaattcagcc cgaagacaca ggccaggtta gagctgttca
                                                                    480
ttttgttgaa gatgctctcc cgggacaccg catgcaggaa gcccatgagg tagcggagga
                                                                    540
cgacgtagtt gtgctctggg aggctccgta agatctggcg gcagccagtg acacgcaggc
                                                                    600
tgctctccac acctggaagg gcatggggct ccctgctgag ctccagaggg gccaggggca
                                                                    660
gcgaggtgat cccgagaatc tgctcgtagg cctggaaggt cagaagcggc tggggcaqct
                                                                    720
ctcgcaggaa ggtcttcagg atcacggcag ggatgtgaat gtccccgtag tcgtcaaaqt
                                                                    780
teaegggett ceettggttg tagageetet ggatetegeg gaeggtetge acqetqqeqq
                                                                    840
atctccggaa caggccctcg gtgcgcaggc ctttctctct caggtacgtc actgtgaacc
                                                                    900
tcagcacagg ggggatgagt tcgccttgat ttttgtcttt gaggtat
                                                                    947
    <210> 5637
    <211> 1749
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1713)...(331)
    <223> similar to qi38262 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5637
caatttctga atagcaactg gaatattcaa ccaacaatgg tcatggtcag ttttgtattt
                                                                     60
tttccttaac ttatatactt cattctttcc aactatttta aagctaaatc ttttttaaaa
                                                                    120
aagttttaaa aataagtcac aggcaaatca tgaagagttg ggtttatttc aacagtaaat
                                                                    180
ctgaaactct tgccttaagc aagagtacta cagtaattat atcaggaata gacaatttcc
                                                                    240
tacactgtca aatatataaa agttcctttt gcactttctt caacactgat caacaagcag
                                                                    300
attcagtcca catttgcttt gatctaacta ctgagttaac ccaagcttct tcttcagaga
                                                                    360
ctctggcatc tcgggtggag gagggcgagg aagtctgaag tagaccttca cggagtcata
                                                                    420
gataaaccac tgtagtgcag tcagggtacc aatcatgatg atacgggcaa acagtccctt
                                                                    480
ccatacacct ttaaatccaa gtctcttgag gaccagagaa gcactgctac ctttttcttt
                                                                    540
attcaacaca gataccacag aatcagcagg gtgagaaaca attgcacaaa agactccagc
                                                                    600
tatgtaacct gctacaaatg ttacaaccag ctgctctggc tttgaacatt cactgcgggg
                                                                    660
cttaggaacc acaaacttgt acagtgcttc aacagtacgt tcaaagcagg cgaacttcat
                                                                    720
catggtgtat ggtatctgtc tcatccagag aggaqcaacc cccttgtaga atqcttttag
                                                                    780
gccttcttcc ttatacattt tgggagctgc atccctcaaa gtgttggcat aacctggctg
                                                                    840
ggtttgaatt cgaaccttag cagcttccat aggagccaqq gcaatgtcag caaaqaattc
                                                                    900
960
```

aagcatattg cctatacaag cctttaaaga cttcataaaa gccaaacttg cagagtccct

1020

```
gcatggagta gccaaggaaa gtcggagccc atcctttagc caaaccacga acaccatcct
                                                                     1080
ctttaagtgt aactgagaat ccgttaaata tgcccttgta cttttggggg tccacctgca
                                                                     1140
tacggcattt cactaaatcc aggggaacca cagcagtgtg tgtcagacca caacttaaga
                                                                     1200
ccccaccaaa gccacacagt gcataatact tcgcggagcc aaattcacaa ctgtactctg
                                                                     1260
tagtaagaga agacacacca tgcattttaa tataaaactc atgttactgg tcataaactt
                                                                     1320
acctcctgga cagttaggtt tccacacagc ttgttagatg actatatctt ataacttaac
                                                                     1380
agtcagtcat gcttcaatat gctctagtcc agcatgcaaa acaaacctgc attctgcatt
                                                                     1440
taaccagatc tagaggaacc aatgctgtat gtgttgtgcc acagctaata attcctccaa
                                                                     1500
gtccacaaag gataaagaat ctgccagatc catagtcaca gctatactqc tcttccacqq
                                                                     1560
eggeggetge eaggttgega gggeggeggg getggeeegt gggeeetggg gagetgetge
                                                                     1620
ggaggtcccc gagaccatcg tgcaccagct gcagatgtgg cgtgttgaag gggttcqccc
                                                                     1680
gcgccaggtg cgccacggac gagaacatct tttccctaag atggcgatca cacaaccact
                                                                     1740
cccttggaa
                                                                     1749
```

```
<210> 5638
<211> 1600
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1582)...(1283)
<223> similar to gi1419759 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5638 tttcgtgtcc gtggcggctg cacgagcagt tcctgtgggc agtgggctca ggggcctgca 60 acggacceta cetettgtag tgattetegg ggecaeggge aceggeaaat ceaegetgge 120 gttgcagcta ggccagcggc tcggcggtga gatcgtcagc gctgactcca tgcaggtcta 180 tgaaggccta gacatcatca ccaacaaggt ttctgcccaa gagcagagaa tctgccggca 240 ccacatgatc agetttgtgg atcetettgt gaccaattac acagtggtgg acttcagaaa 300 tagagcaact gctctgattg aagatatatt tgcccgagac aaaattccta ttgttgtggg 360 aggaaccaat tattacattg aatctctgct ctggaaagtt cttgtcaata ccaagcccca 420 ggagatgggc actgagaaag tgattgaccg aaaagtggag cttgaaaagg aggatggtct 480 tgtacttcac aaacgcctaa gccaggtgga cccagaaatg gctgccaagc tgcatccaca 540 tgacaaacgc aaagtggcca ggagcttgca agtttttgaa gaaacaggaa tctctcatag 600 tgaatttctc catcgtcaac atacggaaga aggtggtggt ccccttggag gtcctctqaa 660 gttctctaac ccttgcatcc tttggcttca tgctgaccag ttctagatga gcgcttggat 720 aagagggtgg atgacatgct tgctgctggg ctcttggagg aactaagaga ttttcacaga 780 cgctataatc agaagaatgt ttcggaaaat agccaggact atcaacatgg tatcttccaa 840 tcaattggct tcaaggaatt tcacgagtac ctgatcactg agggaaaatg cacactggag 900 actagtaacc agcttctaaa gaaaggtatt gaggctctga aacaagtaac taagagatat 960 gcccggaaac aaaaccgatg ggttaaaaac cgttttttga gcagacctgg tcccattqtc 1020 ccccctgtct atggcttaga ggtatctgat gtctcgaagt gggaagagtc tgttcttgaa 1080 cctgctcttg aaatcgtgca aagtttcatc cagggccaca agcctacagc cactccaata 1140 aagatgccat acaatgaagc tgagaacaag agaagttatc acctgtqtqa cctctgtqat 1200 cgaatcatca ttggggatcg cgaatgggca gcgcacataa aatccaaatc ccacttgaac 1260 caactgaaga aaagaagaag attggactca gatgctgtca acaccataga aagtcagagt 1320 gtttccccag accataacaa agaacctaaa gagaagggat ccccagggca gaatgatcaa 1380 gagetgaaat geagegttta agagaeatgt eeagtggeet ttggaaaggt ggtgggate 1440

```
cagttcagga gggaggggta tgtttgtctc ccagtctggg caaaggagtg ctatgcggaa 1500 ttctctgcat agcagaaaag ctcccaccat tttcttttga tgtggtttta aagtctcacg 1560 ttctctataa tagaaacagc aggtcttgtc agctccttgt 1600
```

```
<210> 5639
<211> 4405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4406)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4312)...(2392)
<223> similar to gi30866 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5639 cgggcatggt ggtgtttgcc tgtggtccca gctacttggg aggctgaagc aggacgatcg 60 ggtgagctga ggcagtcgag gctgcagtcc tcgagtgggc tcaggagaag cgtaagctga 120 gcgtgttgca tattcacgga gtctacacca accctagtgg cattgtcctt catccgqctq 180 gatatcagaa cgtgctcagg aacactgaag tcatgagaga aattcagaaa ctctacgaaa 240 acaagtcatt tcttttcctg ggctgtggct ggactgtgga tgacaccact ttccaggccc 300 ttttcttgga ggctgtcaag cataaatctg acctagaaca tttcatgctg gttcggagag 360 gagacgtaga tgagttcaaa aagcttcgag aaaacatgct ggacaagggg attaaagtca 420 tctcctatgg agatgactat gccgatcttc cagaatattt caagcgactg acatgtgaga 480 tctccacaag gggtacatca gcagggatgg tgagagaagg tcagctaaat ggctcatctg 540 cagcacacag tgaaataaga ggctgtagta catgagcgag ctagagaaat caccaccgtt 600 tagaccaagc tgtaaggccc tactacagac agtgtttaac aagtaaactt tacaagaacc 660 caacacaatt ccccagaaag taacaatagc cagaggttga agggcggggt agaagagggg 720 ggaatgttgc aagcgtaatc cttcatacca ccctggttct tggatattct gccgcctgtt 780 caagttcaag aataaaagcg aacagcagga ccccaaatgc agctccccaa ccccactccc 840 ccaggcctag acatgccttg tgtcccacac agcacaccca atgtgatact tcccactgac 900 ccggctgcag ctctgcatga aggactcggg gtcctggatg cccatgggaa tcactgtggg 960 ctcttgttgc agttttgtac ttctattact tggttttttc aattaagctt aatggctttt 1020 ttaaaaacat gacttgaagc tctagttttc taggaccttt tacagtgtta cagtattttt 1080 acataactaa gcctgtattt aaaagcttgt ttcatttacg ttgccaggac cctggctcta 1140 cttttagagc tcattgtaag aaactctaac ttgcatcaag gtactaataa gcttaatttt 1200 aataacccaa agtttaaagg ttccgatctt tctccttggg gtggagtgat ctcattctca 1260 ggacaaccgt ttacttacct gattcctcgg agcattatca acttctgctc tgttgtcctg 1320 accatacata tgtcctagaa ctacagttaa gtgtgttgtg gaattttagt tttgaatcct 1380 gtataagaga actccaagac ctaaaaggca atttatttat gaaatttatt ttcttatata 1440 aattacttat ttctctgggc agacagcctt caccttattg cactaatagc acatctgtaa 1500 tatcaagcta caggacaagt cttaacaaga ggtttgtgtt cttcaatgta gcacttgtct 1560 accaggcact gtagagggga gtgatgagga aaagccagga ctgcttagga ggtgaaggat 1620 gggagggag ggggtcatca tacatccttc tgacaattgg tttcctccca ggaagggaa 1680 catgcagage ttacttetgg attetgggag tgggaagagt tgggaggeea agaageecaa 1740

```
tgcaacgctg cagctgagct ccttttattt ctgagggaag caaggactca tcttttgctc
                                                                     1800
atttgtaaca aatcactcca gcctagctga tgctttgggg taaacaatgg agtaggagtc
                                                                     1860
atcatcagaa ttagaattag cagcaattaa caggcaatac actgccacag tgaggcgggt
                                                                     1920
qtcatccagg tcctggggac ctgcaggctg tgtatcctag ggagaggtgc cattcaagac
                                                                     1980
ctggcgctgg ctctggaaga gtctcttaac ctaatgcagc tgggactcat taggctcaga
                                                                     2040
cggctcttga ccacactaat tattagcaaa gctctqqtqt tqqqttccaa ccattqqtca
                                                                     2100
aagctgtaat aagactgagt ctgtaggcag agtgaagggg gtgcctgagt aggaaggggg
                                                                     2160
aggcccgctg ggagagggtc agtgggcagt gattgtaaca tgattaggcc ttccttgcag
                                                                     2220
atggcggctg tgctgaacgg ggagtggggt tggaaggagc cacaagcccc ctcactctqc
                                                                     2280
ctttgtacta cactgaagac aggttgctca catactctaa agcacattct tgatacagga
                                                                     2340
agaagggctt gtggggaaag cggcgatttg gtattgggca agagccacgt taagccttca
                                                                     2400
tgagggcagc caccacagcc ttggcattga ggctgcgtag gtcacagtag gtctggccgg
                                                                     2460
tgcccacaaa gacgatgggt ttgcttgtga tgtacgtcat agaaatagca gctcccacct
                                                                     2520
tgtcatcaat ggaatcaaat ttggtaagaa caatgccatc aatgagccga qqtqtctgag
                                                                     2580
ccatagaatg gtcagccaag gctctgttga acttgaccag ctggtccacg gcttcattgc
                                                                     2640
ctactaaggc ttctcctaca aacagcacca aatcaggtgt attgacagta atgagtttgg
                                                                     2700
ccagggcagt catcagaggg gcattgtctt gcatgcggcc tgccgtgtcc accagcacca
                                                                     2760
cgtcaaagcc ttggttacgt gcaaaagcaa tggcttccat ggcaatgcca gcagcatcct
                                                                     2820
tgccatagcc cttttcaaac aactgcacca tggtgcggcc accatgcttc tctggagggt
                                                                     2880
qtaqqqcact caaacqccqq qtqtgtqtac gcagctgctc cacqgcccca gcacqaaatq
                                                                     2940
tatcacaggc agcaatgagg acactgaagc cattctctaa caaccagaag gaaatcttgg
                                                                     3000
caagattagt agatttcccc actccattaa cqccqcaqaa qqtqacqaca taaqqqcqct
                                                                     3060
tggcgacgct gggcatccat gatgtcccgg agcatgtcta cacggacgct gtggctgcac
                                                                     3120
gaatctgcac cagggactcc tgtagggctt gctttactgt ggaagtcacc gtgctgaacg
                                                                     3180
tececateae ettecettee aacttgttgg caacagatte acagagetgg acggeaatgt
                                                                     3240
ctgcagccac gttcttagca atgagatgat cacqcatctt gtccagcaca gattccatgt
                                                                     3300
cttcacgact caagctcttt gaacccacaa ggcccttcag cataccaaac atgccaccca
                                                                     3360
gtgttccctt ggtcgcacta ggtttggtag agttttgagc agccccttcg tcatcagagc
                                                                     3420
tgctgcagtc cagatcctga agctgcccc cagacccagt ccctcgaatc aggttgatgt
                                                                     3480
cctcagacaa ggcagcctca ggggttccat tggtggtggg agtactggaa tccaacactt
                                                                     3540
ctttgttagc acagccaccc agttcccaca cccggggtgc ttttttgccc ttctcctttg
                                                                     3600
gagcatctga cttcgtggac ttgttggact tctccatacc cctcccatgc ttctgaatga
                                                                     3660
actectegeg ettectgegg ateageteet etttggaaag ttetaceteg tteteaggae
                                                                     3720
ccactggaag acctgacttt tctgcaggga ctggtttgct ggtagccaaa ggaccatcag
                                                                     3780
aaccttectt ettggeece ttttttttge tattetttge ttttteettg ggetttteee
                                                                     3840
cccgtgtctc aatcatggac ctcacaggtt tcttggcctt ttcaqaatct tcaaatttct
                                                                     3900
tcatggtagt gggagcacgg atcttactgc tctcctctqc ttcacgaaqq aqccqcaqqa
                                                                     3960
agtcattttg gaaatcaaaa gtgcccattt aataaacttt aaagccactt tgctgttgga
                                                                     4020
tctctgtgcg gtacttgtcc cgaaacagcc gatgcacgtc atctatcaat ttgtctacat
                                                                     4080
atgtcagtqt caggatcttc tqaaaaccaa ccacaaacac cagctcaaac tqqttqtcca
                                                                     4140
gtttatactt gagtgtgagt gcctcatggg tgaaagaagg ttgttacctc nccccgttcc
                                                                     4200
tgcagcagca cggaacgaat caacgcgtta acgggtccgg tgcatgagtc gctaacgccc
                                                                     4260
tggaagcacc agagcacaag cccgcccttg gagaaaatgg tgaagaaagt cgagcatggc
                                                                     4320
ggcagcggca gaggagctgg ggccggcgcc gggaattcag gccgcgttcg ccqccqcttc
                                                                     4380
ctgctgcgcc aagcgcggga cacgt
                                                                     4405
```

```
<210> 5640
<211> 7027
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (70)...(2426) <223> similar to gi4688902 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5640 gggcggccgt tcccgcggcc ccctcgcgct ttgcccaggc tccccctgcg aggccggagg 60 caggatggaa gatggactgt ggatttcgag gagtgtctga aggacttcgc cccgcttcag 120 ggcagctttg gaagaagtag aaggtgatgt ggcagaattg gaactaaaac ttgaataagc 180 ttgtgaaact ttgtattgcc aatgattgat actggaaaag ccttttgtgt tgcaaataaa 240 cagttcatga atgggattcg agaccctggc tcagaattct taataatgat gcttgtcgtt 300 gagaccaagt ttgccccaag ttttctggac agtcttcaag aaatgataaa ttttcacaca 360 atcctgtttg accaaactca gagatcaatt aagggcacag ctttcagaac tttgttaaag 420 aagatettag aaaatteaaa gatgeeaaga ageaattega aaatagteag tgaaagagaa 480 agaaaattgc gttagtaaaa aatgccccag tacccagtag accagccagc ttggagttgt 540 agaaaccccc caacattctg acagcaacaa gaaaatgttt ccgacacata gccctcgatt 600 atgtgcttca gattaatgtt cttcaatcaa aaaggagatc agaaatccta aaatcaatgt 660 tgtcatttat gtatgcccat ttggccttct ttcatcaagg atatgatctg tttagtgaac 720 ttggacccta catgaaggat cttggtgcac agttggatcg actggttggg gatgcagcaa 780 aggagaaaag agaaatggag caaaaacatt ccaccattca acaaaaggat ttctccaggg 840 atgattctaa attaaaatat aacgtagatg ctgcaaatgg catagttatg gaaggatatc 900 tgttcaaacg agccagcaat gccttcaaaa cttggaacag gcgctggttt tcaatacaaa 960 ataatcaggt ggtttaccag aaaaaattta aggataatcc gactgtggta gttgaagacc 1020 tcaggctttg cacagtgaaa cattgtgaag acatagagcg acgattctgc tttgaggtgg 1080 tctcgccaac aaaaagttgt atgctccagg cagattccga aaagctgcgc caggcatgga 1140 ttaaggetgt teagaceagt atttgetact gettatagag agaaggatga tgaateagag 1200 aagctggata agaaatcatc tccatccaca ggaagcctag attctggaaa tgagtccaaa 1260 gagaaattat tgaaaggaga aagtgcgctt cagcgggtcc agtgtatccc tggcaatgcc 1320 agetgttgtg actgtggcet ggcagateca eggtgggcca gcateaacet gggcateace 1380 ttgtgtatcg agtgctccgg aattcaccgg agccttgggg ttcatttttc aaaagtacga 1440 tetttaaett tagacaeetg ggageeagaa ettttaaage ttatgtgtga gttggggaat 1500 qatqttataa atcgagttta tgaagctaat gtggaaaaaa tgggaataaa gaaaccccaa 1560 ccaggacaaa gacaggagaa ggaggcatat atcaqaqcaa aatatqtqqa qaqqaaattt 1620 gtggataaaa tattcctata atcattatca cctccctgag cagcaaaaaa aagtttgtct 1680 ctaaaagttc tgaagaaaag aggctgagca tttctaaatt tggccccagg ggaccaagtc 1740 agagcatctg cccaaagttc agtcagaagt aatgacagtg gaattcagca gagctctgat 1800 gatggaagag aatctttacc ctccacggtg tcagccaata gtttatatga gcctgaagga 1860 gaaaggcaag attettetat gtttettgae tegaaacate ttaateeagg aetteagett 1920 tatagggcgt catatgaaaa aaaccttcct aaaatggctg aggctttggc tcatggtgca 1980 gacgtgaact gggccaattc agaggaaaac aaagcgacac cacttattca qqctqtatta 2040 gggggctctt tggtgacgtg tgagttcctc ctacagaatg gtgctaatgt caaccaaaga 2100 gatgtccaag ggcggggacc attgcaccat gccaccgtct tagggcacac agggcaggta 2160 tgtttattcc taaaacgagg tgccaatcaa catgccactg atgaagaagg gaaagaccct 2220 ttgagcatag ctgtggaagc agccaatgct gatatagtca ccttgttacg tttagcaaga 2280 atgaatgaag agatgeggga ateagaagga etttatggae ageeaggtga tgaaaettat 2340 caggacatat ttcgtgattt ttcccaaatg gcatccaata atccagagaa actaaatcgt 2400 ttccagcaag attcacagaa attctgaatt tttttaaaaa tgggaaaata tgcccatctg 2460 gtgaccccct aatgtataca gctaaaaatt cacaattttt ttactgcttt aattctactt 2520 aattttggta gatattgaat ggcttggaaa agaggtaccc attcatatat ttataaatta 2580 ggggagtagt tatctagtag taggagagga acctagttta ggacctcttt tatttaaaaa 2640 agcctattta aagggctaat ttctggtaga cagaagttca gtctagattt aggccatctc 2700 tagggttaca agatgatagg aggttagacc aaaagtgatt cttttgccaa tgggtggtgg 2760 cattgatttt tttcctccat gcatcttqcc caqqatcact caqtcaaqca tqtcttcatc 2820 aagtggaagc caactgtcct gcctgcctca agaatatgtg ttttctttag cttccctgag 2880 gatttttggt ggttcagaaa taggtgtgtg tgttgatgtg tttttggtaa cctagctttc 2940

atacacataa tatatgattt attagaacta gagaatgtgt tttccccgtt tgttcataaa 3000 tgcggtcggt tatacttttt aggtgacagg ttattgtcca gtactttaaa gtaagtatgt 3060 3120 aaagctcttt tttttttta atcacaaaaa aaaaccccag ttcaaaatgt gtagttcttc 3180 attgttgggt tgattcccca aaaccttgac agatgtatcg atggaataaa agtatgtttt 3240 aaaggttact tgaatgtcac aaaattatgc cttcatcaaa actttaaagg aaaaatcaat 3300 ttataaaatc atgtaggcca tttttatatt tgaaatttgt ccttttaaag atagttttgc 3360 tgttgctcct agtgaaagaa aaatctctgt acaaaggaga aaaagaaccc cacttattct 3420 tagttaatac taaaatatat agcaataaat tgctgtttat tttttctaca tctattttgt 3480 gtacttgtac acagtgtaca ttcttttaaa ttatatcgtg tatatagctt tagtattcgg 3540 ttacatgatt cacagacccc tgaattccaa aatattatgg ataaacatta ccatttatat 3600 gctacaaatt agtctgattc catctttgaa aatgtcttaa agtataaaat aattaatttg 3660 ctttttttt tttttcccg agatggcgtc ttgctgtgtc acccaggctg gagtgcagtg 3720 geacgatete ageteactge ageetectee tettgggtte aageaattet eetgeeteag 3780 cctcccgagt agctgggact acaggcaccc gccaccattc cgagctaatt tctatatttt 3840 tagtaaagac gggtttcacc attttggcca ggttggtctc gaactcctga cctcaggtga 3900 tcagcctgct ttagcctccc agagtgctgg gattacaggc gtgagccacc gcacccagcc 3960 taatttgcct tttgattcct tcccattgtt gtcaacaatt aagtctattc ttcttttaga 4020 aattatatgt aaatgatatt attgatactc tttctaaata agaggtttta aaatatataa 4080 aaactttatg atccaattat agataaattt tctaacattt cccagtcact agggttttat 4140 aagttgatta aacatcaaat cagaatctag ccaagcagga attatattga aataagttca 4200 cattacagaa aaggttccca taatttggcc caaactgcca tgcatgtaat gccttattta 4260 gtaatggtca ctgtatgtta gataaggata aaaatatatt tgtgaattac ttctgaggaa 4320 atgcctaact tcccacagca ttgtatttaa ttataacaat aacgaggaac attaaatctt 4380 tatctttgct gtttcacctc aaagtcatag atcatctggc tttttaggca ccttcactaa 4440 aggcaaaaat ctgatttgta gtttttatta gcatgtacct tgaaattatt tgaccaagaa 4500 gctcaaagaa aagaagtacg ttaaagaaaa agaaaaaacc tcacttttcc tttatagtgt 4560 ecetteetgt tttaatteet aaagateetg aettttatet gaggaagtet aggtagtttt 4620 ccttttggat ctggccattg gtgcgtgttt cattcagatc acctctggaa tctctgtggt 4680 tgtgaaggca attccttatg agactcttgc ctcctgtggc ttacgtgatg aattgttaat 4740 atggcagtaa ttaattagta tctacttaaa tttagtggtc agaaatgtat ttgaagtgcc 4800 ttaaagatga tcatggttca gaatatcttc agagaaagca aaatctttaa tattgcaggg 4860 agcctagcaa tacaagtaca catttctgtg gcttgatttc ttgaatatgc tgagacccaa 4920 tttggactac atttggcaga aatcatggag taaacagcaa ggctttaaat taaattaata 4980 gttacaaggt aggttggctc ttaggtgaat ttagccatgt caactaatag cttttatatg 5040 gtatgtaaca aatctgaatt atgttatgct gtgaattatt cagtgcatta taagaaatct 5100 tagttaatca tgcttttggg cttcattagt caatgtgatt ggccttttat tttctttcca 5160 taacttatct gctattatta gtttcttatt ccttattatt aatctgttag ctcattatca 5220 ttagcttact aacttgaaag ttagattaat atcaaaataa gaatagcagc actatgaaga 5280 gttaataaaa tgcaatttca tgttagagct agaataaaag taattgagca gtcatttgca 5340 aatgcttcat tataacattt atgtgcttaa gatttctaag gttttaaaaa gttaccttta 5400 atacaateet tagaaaetea gaaattteet gatatteatt agattatggt gtttgeetaa 5460 tttataccgg ttttcactgt atattttaat gaactttgat tggttacttt tccagacata 5520 cagatttaat ttggaatatg aactttggtt cttcatgagt gcattttgaa aaagaaaaa 5580 agtacacatt cagaatctgg ccaatttaag tttgtatttt aaaaatattt tatgcatgtt 5640 aagtatggtc gcagtaaatg aaattgtgtt taagactaaa tttactaccg ttttgaacag 5700 acattocoag atcattotta tattgtoaga taacacttgt gtataatato actttggato 5760 atggacatga gctggaaaaa tgatgtattt ttgtagattg tatgtccaga atgactttag 5820 aaccgcatga tacggtggaa ggagcactgg actagtcgtc actacccttt ttggattcag 5880 ggctcctcac aattaaaatg agtgtaatga aacaaggtga aaatatagaa gcatcccttt 5940 gtatactgtt ttgctactta cagtgtactt ggcattgctt tatctcactg gattctcatg 6000 gtaggatttc tgagatctta atctaagctc caaagttgtc tacttttttg atcctagggt 6060 gctccttttg ttttacagag cagggtcact tgatttgcta gctggtggca gaattggcac 6120 cattacccag gtctgactga ccaccagtca gaggcacttt atttgtatca tgaaatgatt 6180 tgaaatcatt gtaaagcagc gaagtctgat aatgaatgcc agctttcctt gtgctttgat 6240 aacaaagact ccaaatattc tggagaacct ggataaaagt ttgaagggct agattgggat 6300 ttgaagacaa aattgtagga aatcttacat ttttgcaata acaaacatta atgaaagcaa 6360

```
aacattataa aagtaatttt aattcaccac atacttatca atttcttgat gcttccaaat
                                                                     6420
gacatctaca gatatggttt tgtggacatc tttttctgtt tacataaatt tatccactta
                                                                     6480
aaatgtgata atgtggagac aaagcaagat ttgattacat aaacttttct ctqcattqqt
                                                                     6540
cttttcacta tcttatttgc taacttttct tatttttctt caacctcccc accctccatt
                                                                     6600
ttttggatat taaacaggga aagcttgcta cattataaag attgttggca ccatttattt
                                                                     6660
tacacaaagg ctaaaggtta acttttggaa atgatgagct acttttatat atgtgtttac
                                                                     6720
tcatgctttg tgatatttct ggatcattcc agtcataaaq acttattaca tgtactattt
                                                                     6780
cttgctacct gtgaaaaggt atattttaaa gaatgtataa ccaacagtcc atttactttt
                                                                     6840
tattagtatg tagaggattt gtatctaatt catgaatgta gttttacagt agtttgtcat
                                                                     6900
tgtaaatgga gcaaagtaca ttatcttcta aaatgtacat tatgtaagaa ttgtaaatat
                                                                     6960
acttaagtaa tttgtatgcc aaaaaattac aataagtcaa taaagatctc acctctgaaa
                                                                     7020
aaaaaaa
                                                                     7027
```

```
<210> 5641
<211> 3844
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3845)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (893)...(3611)
<223> similar to gi3413882 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5641 aaaaacggac cctcattaac agaagcactg gaaaacgctg gaattttcta tgaagcacaa 60 tacaaagaag taaaagtggt ggctaatgca tataaaacct ttgctaaccg agtaaacaat 120 ttaaagaaga agttggatca attgaagtca accettccag atcetgaaga atcaccagtt 180 cettececaa geatggaege teceteceeg actggttetg agteteettt teagggaatg 240 ggaggtgagg aatcccagtc accaaccatg gagagtgaga aatctgccac acctgaacct 300 gtgacagata atcgtgatgt ggaagacatg gaactctcag atgtggaaga tgatggtca 360 aaaatcattg tcgaggacag gaaggaaaaa cctgcagaga agtcagctgt atccacttct 420 gtacctacaa agccaacaga aaatatctca aaggcctctt catgtacccc agtgcctgtg 480 accatgacag caactccacc tcttccaaag cctgtgaata cttctctttc cccttcccca 540 gcattggctt tgccaaacct ggctaatgtg gatctggcaa agatcagttc catccttagc 600 agtttaacat cagtcatgaa aaatactggg gtcagtcctg catcaagacc ttctccagga 660 acgcccacca gcaacagcat cctcaccagt ggcctgaaaa cacctgcacc tgccacgaca 720 acatctcaca accetctgge aaatateete tecaaggtgg agatcaceee agagageatt 780 catgtctgca ctttccaaaa cccagacaca gtcagcccct gcactgcaag gcctgtcatc 840 tttacttcag agtgttactg ggaacccagt tccagccagt gaagctgcct cacagagcac 900 ttcagcctcc cctgccaaca ccacagtcta taccataaag ggaagaaatc tgccctccag 960 tgcccaacct tttattccca aaagcttcaa ctattctcct aactcatcaa cttctgaagt 1020 ctettcaact tcagccagca aggectcaat tgggcaaage ccagggetee caaqeactge 1080 ttttaaacta ccttccaaca ctaaggggtt tacagctacc cacaatacta gccctgctgc 1140 cccacctact gaagttacca tctgccaatc ttcaqaggtc tccaagccaa agctgggagt 1200

```
cagagtccac ctccccaagc ctgggaaatg aagattcaca acttcttaaa aggtaatcct
                                                                     1260
gggttttcag tggcttaaaa cttaaaacat cccaatcctg naggcagttt ggggtccagc
                                                                     1320
gccccatcag agagccatcc ctcagacttc cagcgtggcc ctactagcac ctcaatcgac
                                                                     1380
aacattgatg gaacccctgt acgggatgaa cggagtggga cacccaccca ggatgagatg
                                                                     1440
atggacaagc ccacatccag cagtgtagat actatgtccc tgctttctaa gatcattagc
                                                                     1500
cctggttcct caacacccag cagtacaaga tcaccaccc ctgggagaga tgaaagctac
                                                                     1560
ccccgagagc tctccaattc tgtatctaca tatcgaccct ttggtctggg cagtgaatct
                                                                     1620
ccctataagc agccttctga tggaatggag agaccatctt ccctgatgga ctcttcacag
                                                                     1680
gaaaagttct acccagatac ttcttttcaa gaagatgagg attaccgaga ttttgagtat
                                                                     1740
tcagggcctc caccctctgc catgatgaac ctacagaaga aaccagccaa atctatcctg
                                                                     1800
aaatcaagca agctgtctga taccaccgag taccagccaa ttctgtccag ttatagccac
                                                                     1860
agagcccaag aatttggggt aaagtctgcc ttccctccat ctgtaaqqqc cctcctqqac
                                                                     1920
tctagtgaga actgtgaccg tctctcatct tcccctgggc tatttggtgc cttcagcgta
                                                                     1980
agagggaatg aacctgggtc tgaccggtca ccatcaccga gtaagaatga ttcatttttc
                                                                    2040
accectgact ccaaccacaa tagettgtet caatetacca etgggeatet cagtttgeca
                                                                     2100
cagaagcagt acccagacte tecteaceca gteceacate gttecetttt eteteegeag
                                                                     2160
aacacccttg ccgctcccac gggtcaccca cccacgtcag gcgtggagaa agtcctggcc
                                                                     2220
tccaccattt ccaccacgtc gacgattgaa tttaagaata tgcttaaaaa cgcctcacgt
                                                                    2280
aagccctcag atgataagca ttttggccag gctcccagca agggcactcc aagtgatggt
                                                                    2340
gtcagtctct caaacctcac ccaacccagc ttgaccgcca ctgatcagca gcaacaagaa
                                                                    2400
gagcactacc gcatagaaac ccgcgtctcc tcctcctgct tagacttgcc tgatagcaca
                                                                    2460
gaagaaaagg gggcccctat agaaaccttg ggttatcaca gtgcatccaa taggaggatg
                                                                    2520
tcaggggagc cgatccagac cgtagagtcc atccgagttc ctgggaaqqq aaataqaqqa
                                                                    2580
catgggcgtg aggcttcaag ggtgggttgg tttgatctga gcacatcagg tagctctttt
                                                                    2640
gacaatggcc cttcaagtgc ctctgagttg gcatcccttg ggggtggggg cagcgqaggc
                                                                    2700
ctcactggct ttaaaacagc accatacaag gaacgggcac ctcaatttca ggagagtgtc
                                                                    2760
ggcagctttc gttccaacag tttcaactca acatttgagc atcatcttcc cccatcccc
                                                                    2820
ttqqaacatg ggacaccctt ccagagagag ccagtggggc catcatctgc cccacctgtc
                                                                    2880
cctcctaagg atcatggtgg tatcttctct cgagatgcac ccactcatct accctctgtg
                                                                    2940
gatetttega acceetteae aaaggaggea geeetggeee atgetgeeee acceeteet
                                                                     3000
cctggagagc acagtggaat tcctttccct accccacctc ctcctcccc tcctggggaa
                                                                    3060
catagcagca gtggtgggag tggtgtcccc ttttctactc caccccctcc tccaccccct
                                                                    3120
gttgaccact ctggagttgt accettccca gccccaccac tggcagagca cggagtggca
                                                                    3180
ggggctgtgg cagtatttcc caaggaccat agttccctcc ttcaagggac cctggctgag
                                                                    3240
cattttgggg tactcccagg acccagggac cacgggggcc ccacccaacg ggacctcaac
                                                                    3300
ggccctggcc ttagccgtgt acgagagagc ctcaccctac cctcccattc tctggaacac
                                                                    3360
etgggcccae cccatggagg aggaggtggg ggaggcagca acagcagcag tggcccccc
                                                                    3420
ttgggtccct cacacagaga caccatcagc cggagtggta taatcttacg gagtcccgg
                                                                    3480
ccagactttc ggcctaggga accttttctc agcagagacc catttcacag tttaaagaga
                                                                    3540
cccaggccac cttttgctag gggccctccg ttctttgcac caaaacgccc attcttccct
                                                                    3600
cccaggtact gatggaaacc aagggaaagg cattttgaac agtctagaga acattggaag
                                                                    3660
taggagtttg gtttattgtt gttgttttta tttgttttct ctttctcgat tttttttta
                                                                    3720
ttataacaaa gggcctctct tccaaagtaa gaaatcacat acgcttacgt tttactattc
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aattcaatcc tccctcccat tgcacttatc taccttcccc aagttgtttg tattaaaaaa
                                                                    3840
aaaa
                                                                    3844
```

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<210> 5642
<211> 390
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc feature

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<222> (312)...(2)
<223> similar to gi4379237 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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<400> 5642
tcatcaatac agtgaaacag cgtaatattc tatagaccat ccaggtgatg aaggcccatt 60
aggcctacat tgtgacagag aagagaggt taacatcagt ctgggccaga cagtgaactt 120
ataatgttat ctcttccaag tgaatgcaaa ccgtgtctga gcctcctctc tgatggggat 180
tggaaagaat gcctttctcc caggccagtg accacataca agttccagag gccctgctgt 240
cctgttgtac taaggatacc acgtctagca cagcacctgg actatgggtt acagcttggt 300
taagtttatg taacccacta ccattcacca taatccatct ggcttctact ggggccatat 360
tggtgaatta aagtctctga aagtagaact
```

```
<210> 5643
<211> 2152
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2153)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1405)...(912)
<223> similar to gi3874447 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5643
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                                                                       60
agcctggggg ctgaggaccc cgaattgtgc agggggcggg gaagaaaaga ggtgaaggca
                                                                      120
aaaaggcagg caatgcagag acaccgtggc ccaagcagag ggggtgcaag gcaggcacag
                                                                      180
agcagggggc ctgatggcgg attggggagg tggagaaccg gtcagccctg cctagacctt
                                                                      240
gggactggtg acacccacaa ctttgaaggg ctgccctccc ccaccaggaa tggcacttqc
                                                                      300
eeggggeace ettgtgggga gggeeeaget cetecacetg ceetgageeg ggteeagett
                                                                     360
tcacaaaggc ccctccaccc aggacttccc aaccatgcag actcccggtg gagggcagga
                                                                      420
agetggggte tggggeecag eegggaegtg gaggtgggge etatgaggga geagatgaag
                                                                      480
ttgttggtgg ccctgggacc ctgggcaagt ccctaaggaa cttccaggat cccatagaag
                                                                     540
cccctgagcc agctaagaag ggaaggaagc agaacccaac gaagcaggac ggcgctccaa
                                                                      600
cgaggcctgg cccctcaaac ctgctcctgt cggggaagct caggagcaga taggcgaaaa
                                                                      660
gcagggggac ccacctgggg ggagggggca gcagacagag cagccaggcg ggcagcagag
                                                                     720
cagggacacg cacacaggc tcaccaccag caccccttt aataaaacat ggggggggg
                                                                     780
tcatgtgaca ggaagaaggg ggtgaaatag gaccatttta caaccacaga aaaacctctg
                                                                     840
taacaatgtc ctaacgccct ggcaagaagg gggcaaccag ggcaaccaag cgggctggaa
                                                                     900
cccagcccta ttttgtagag gatatcgtag tgtcccaggc cggtagagaa ggtagacctt
                                                                     960
tgggctcgga agccctcagg gaaagatgtg cggattggtg gttgccgccc tcgnccgcqq
                                                                    1020
```

```
teccatgtae teccaecetg gatggaeacg etgaaggeee tgggeeageg caatgatgtg
                                                                     1080
gatgtggtcg ctctccttgc acatgggctc caccttcctg cttggcagaa ctccttgaca
                                                                     1140
qtccqtccac cctcqatqaa gtqctcqaaq aacttqctct cqcqctqcaq gtaqcccqaq
                                                                     1200
gtgagcagcc gcaggtagac cacaaggtag tcggaggtgc tctggtcatt gaaggaggcc
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agcaggtcgg cgacagaggt ctgcttctcc acctqctcaa tcaggtccat gaacgtgttg
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tggaaatcct caattgtgaa ttcagtgaag ccctgggaca ccaggtcttc cttgctcttg
                                                                    1380
gcagacacag ccttgaacct gggggtggga tggaaaggcg ggcccagcat gggctcctcg
                                                                    1440
accageceag aegeeaggge egagaeagea etgeeeegee tggeaaggee agagteeage
                                                                    1500
ccatcgcccg ggaaggaggg agacaccta ctcgagacac atcctactcg cccggggagg
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aggtagacac ccacctgcct cggtgcccag tgcccaccct tctcaccgct gcaactcctt
                                                                    1620
gctgtcatcc agcagtgcct ccaagtggga gaatccgaaa gcccgataga aacagttgcc
                                                                    1680
gtcaggcctg gtcttgcgga tgtacgagta ctttttgtgg aggtccttga tcttctgttg
                                                                    1740
atagatgttg tcatcttcag catactcctt gtataggacc gagagctcca gccgctctga
                                                                    1800
caccagaggg ttctgcacag caatctcttg ctgaattcgg tcctgctgag ccatgatggc
                                                                    1860
ttcatcatag gccagacagt taacaccaga aaaagtcgca ggcctcaggg acagatcccg
                                                                    1920
caggeceete acateeeagg geegeetaeg acateeegaa tggeeegeee ggaeetttgt
                                                                    1980
gctccgtagc ccagcgaaac tcgaggccct cacggcgcgg gccgccgctg gagcaggccg
                                                                    2040
gggggctcgg ccctggcgta ggcctctctg cctgactgca aggacagggg cgagagggct
                                                                    2100
cggggcccct ggagccagga gccgaggggt tgggcagagg gcggagacga aa
                                                                    2152
```

```
<210> 5644
<211> 2044
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2045)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1888)...(617)
<223> similar to gill50421 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5644
ttttttttt ttaaactttt ataaccttaa agggttattt taaaataatc tatggactac
                                                                       60
cattttgccc tcattagctt cagcatggtg tgacttctct aataatatgc ttagattaag
                                                                      120
caaggaaaag atgcaaaacc acttcggggt taatcagtga aatatttttc ccttcgttgc
                                                                      180
ataccagata cccccggtgt tgcacgacta tttttattct gctaatttat ggacaagtgt
                                                                      240
taaacaggaa caaggaatta ttccaacaag ttatggcaac atgttgctta ttttcaaagt
                                                                      300
acagtttaat gtctaggtgc cagcctttga tatagctatt tttgtaagaa catcctcctg
                                                                      360
gactttgggt tagttaaatc taaacttatt taaggattaa gtaggataac gtgcattgat
                                                                      420
tttgctaaaa gaatcaaggt aataattact taagctgatt cctgagggtg ggtatgactt
                                                                      480
ccaagctgga actccatcct tgatcgggta gggatttttt aaatcccatt tttggtaaaa
                                                                      540
ctatttccca aggaaatttt aaggcccttt cacttcagga aagaaaaaag gttgttgggg
                                                                      600
ggctgaggca ctttaatttt cttgagcagg gaagggagtt tcttcccaaa cttcacccat
                                                                      660
ctggggatac tgggtgtttc ttttacagga ttcctccttt aatttctgtt gagtagccgg
                                                                     720
gateettggg aggeatgtag gaageeeget ggateateae gggataettg aaatgeteat
                                                                      780
```

```
gcaggtggtc aacatactca cacaccctat tttcaaggct tgcagaaact gatatgtagt
                                                                      840
caaatataat caggtgctgc accagttcac agaggccaac tccaccagca tgggggcaaa
                                                                      900
caggaatttc aaactttttg gccatcagca atactgagag gttctcattg acactgccca
                                                                      960
gtctgcaact gtcaatctgg aggaactgca gggccttcgc ctgtaggagt tgcttaaata
                                                                     1020
tcactctatt gtggcaactg ttctccctgg tgcaaatgcc caattcccta aatgggacca
                                                                     1080
gtgccttgga aaatggtggc gtgccccaaa aatgtcaatc aaggggaggt tggctcctca
                                                                     1140
atccacaatg gcttgaactt ggccagcttg gacatccact ccaccgcctc aggcacatcc
                                                                     1200
cagcgctggt tggcatccat catcaaagtc ttttccggtc caatcatgtc tcggatgatt
                                                                     1260
tggcatcttc gcatgtcatc ctggagatca qcacccacct ttactttaaa cctggtccag
                                                                     1320
ccatccttca gcgcctgggc acagagctgc ttcaacgtgt catctgagta ccccagccag
                                                                    1380
gcgcacgatg tcgtgtaagc agggtatcct tgtgccagca tttgcttctc tctttctttt
                                                                    1440
ttaccaattt gacctttctg cagtatttct agggcatcct cctcagtcag gacatcagtg
                                                                    1500
atgtacctga aatctatgca ggataccagc atcctgggat ccatgtccac aagtaacttc
                                                                    1560
cagacagget tteecteetg ettggeecac aagteecaca eegegtttag gaeggeeget
                                                                    1620
gtcgccaggt gcaccacgcc cttttctgga ccaatccatc tgagctgccc atcacttgtg
                                                                     1680
agctgcctat agaagcctct gaagtcacca acaatgtcct tgaggtcctt gttgagcaca
                                                                     1740
tggtgggcga gggcattcac agcacagaca acaacttcag tgccttttcc cagagtgaag
                                                                    1800
gtaattccac accepttgat tocatettet geatcagttt ctatgacgae ataggeagee
                                                                    1860
gagtagtcag ggtccgtgtg catggcqtcc qcqccqtqqc ccccaaqcqa cqtqqqqaaq
                                                                    1920
cgcacgtccc ggaccgagag ccgggagatc ctgccgcgca ccatggcccc tgcgccccgt
                                                                    1980
ggccgcggcc cccgtgcggt caggactggt ggaattacnc cgcactggac tagtgttcat
                                                                    2040
cgag
                                                                    2044
```

```
<210> 5645
<211> 5154
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (296)...(5089)
<223> similar to gi5817151 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5645
gtgtcatggc gctctccatc taaagtctgt gcagcttccg gagagtggcg ggttgatttt
                                                                       60
ctcactttgg actggttttt acttcccgac ttctggactc atctttcaag aggactttag
                                                                      120
actaattgca gataattaag agaatatgcc ttctgcatcc tgtgatacac tactggatga
                                                                      180
catcgaagat atcgtgtctc aggaagcaca gacaaggttg tgtttgacag agaaaggggc
                                                                      240
tttcttggtg agataaaata gtctcttcct gtatttctct cctttctcct tttttagttg
                                                                      300
ctctgggaaa ggaattctct ctggtcatgc agatggtacc atcgttaggt atttctttga
                                                                      360
tgatgaaggc tctggagagt cacaggagaa gttggttaac cacccgtgtc caccctatgc
                                                                      420
cttggcatgg gcaaccaata gcatcgtggc tgcaggctgt gatcggaaaa ttgtagccta
                                                                      480
tggaaaagaa ggtcacatgc tacaaacttt tgattatagc cgtgaccctc aggaqcqqqa
                                                                      540
gttcaccaca gctgtatcaa gtcctggggg ccagtctgtt gtgctaggaa gttatgacag
                                                                      600
gcttcgggtg ttcaactgga tccctcgaag aagcatctgg gaagaggcaa agcccaagga
                                                                      660
gattaccaat ttatacacca tcactgcctt ggcctggaag cgggatggct cacggctctg
                                                                      720
tgtgggcaca ctatgtggtg gggtggaaca gtttgactgc tgcctccgaa ggagtattta
                                                                      780
caagaacaag tttgagttga cgtatgtggg acctagccag gtgattgtga agaacctgtc
                                                                      840
atcaggaacc cgagtggtgc tcaagtcaca ctatggctat gaggtggaag aggtgaaaat
                                                                      900
```

```
cctaggaaag gaacgttact tggtggctca cacatcagaa acactgctgc tgggggacct
                                                                      960
gaacactaat cggcttagtg agatagcctg gcaaggatct ggtggcaatg agaagtattt
                                                                     1020
ctttgaaaat gagaatgtat gcatgatctt caatgccgga gagctaaccc tggtggaata
                                                                     1080
tgggaataat gacaccctgg gttctgtacg cactgaattc atgaaccccc acctcatcag
                                                                     1140
tgttcgtatt aatgagaggt gtcagcgagg aacagaagat aataagaaat tggcttatct
                                                                     1200
tattgatatt aagactattg ctatagtgga tctgattggt ggctacaaca ttggcaccgt
                                                                     1260
cagccatgag agccgtgtgg attggctgga acttaatgag actggacaca agctcctctt
                                                                     1320
cagggaccgg aaacttcgtt tgcatctgta tgatattgaa agctgctcta agacaatgat
                                                                     1380
cctcaacttc tgctcctata tgcagtgggt cccaggaagt gacgtgctgg tagctcagaa
                                                                     1440
ccgaaacagt ctgtgtgtat ggtacaacat tgaggcacct gagagagtca ccatgttcac
                                                                     1500
tattaggggt gatgttatag gtctggagcg gggcggggga aagaccgagg tgatggtgat
                                                                     1560
ggaaggtgtg actactgttg cctacacatt ggatgagggc ctcatcgagt ttggaacagc
                                                                     1620
cattgatgat ggcaactaca tccgggcaac agccttctta gagactctgg aaatgacccc
                                                                     1680
agaaacagag gcaatgtgga aaaccttgag taaactggca ctagaggcaa ggcaactaca
                                                                     1740
cattgcggag aggtgctttt ctgctttggg ccaagtagca aaagctcgat tcctgcatga
                                                                     1800
gaccaatgag attgcagatc aagtatcccg ggaatatggc ggagaaggaa cagactttta
                                                                     1860
tcaggtccga gcacgtctag ccatgctgga aaagaactac aaactggctg aaatgatctt
                                                                     1920
tttggaacag aatgctgtgg aggaggccat gggcatgtac caggagctac accgttggga
                                                                     1980
tgagtgtatc gctgtggctg aagccaaggg gcacccagcc ctggagaagc tacgtcgtag
                                                                     2040
ttactaccag tggctgatgg acacacagca agaggagcga gcaggtgaac tacaggagag
                                                                     2100
ccaaggggat gggctagcag ccatcagcct ctacctcaaa gctgggctcc ctgccaaagc
                                                                     2160
tgctcggctg gtgctgaccc gagaggaact gctagccaac acagagctgg tagaacacat
                                                                     2220
cactgcagcc cttatcaagg gggaactcta cgaaagggca ggtgatctct ttgagaagat
                                                                     2280
tcacaatcca cagaaggccc tggagtgcta ccgtaaaggc aacgcattca tgaaagcggt
                                                                     2340
agagctggct cgattggcct tcccagtgga ggtggtgaaa ctagaggagg catgggggga
                                                                     2400
ccacctggtg cagcagaagc agcttgatgc agccattaat cactacatcg aagccaggtg
                                                                     2460
ctccattaag gcaattgagg ccgccctggg tgcccgccag tggaagaagg caatttatat
                                                                     2520
attagatcta caggaccgga acactgcatc caaatactat cctctcgtgg cccaacacta
                                                                     2580
tgcatccctg caggagtatg agattgctga ggagctctat actaagggag atcggacaaa
                                                                     2640
agatgccata gacatgtaca cccaggctgg tcgttgggaa caagcccaca agctggcgat
                                                                     2700
gaaatgcatg agaccagaag atgtgtcagt gctatacatc actcaggccc aggaaatgga
                                                                     2760
gaagcagggc aagtaccgtg aggctgaaag gctatatgtg acagtacaag agcctgatct
                                                                     2820
tgccatcacc atgtacaaaa agcacaagtt gtatgatgac atgatccgcc tggtagggaa
                                                                     2880
gcaccatcca gatctcctca gtgatacaca cctacatctg ggcaaggagc tggaggctga
                                                                     2940
aggccgacta caggaggctg agtaccacta cctcgaggcc caggaatgga aggcaacagt
                                                                     3000
gaacatgtac cgggccagtg ggctttggga agaggcctac agggtggcca gaactcaagg
                                                                     3060
aggggctaat gcccacaaac acgtggccta tctgtgggca aagagcctgg gaggagagc
                                                                     3120
tgcagttaga ctgcttaata agctgggact cctggaagct gctgttgacc acgctgcaga
                                                                     3180
caattgctcc tttgaatttg cgtttgaact ctctcggctg gccctcaagc acaaacccc
                                                                     3240
cgaggttcat ctcaaatatg ctatgttcct ggaggatgag ggtaaattcg aagaggctga
                                                                     3300
ggctgaattc atcagagctg gtaaacccaa ggaggcagtc ctcatgtttg tccataacca
                                                                     3360
ggattgggag gcagctcagc gtgtggctga ggctcacgac cctgacagtg tcgccgaggt
                                                                     3420
gcttgtggga caggcccggg gggccttgga ggagaaggac tttcagaaag cagaagggct
                                                                     3480
gctgctccgg gcccagagac caggcctggc cctcaattat tataaggagg ctggattatg
                                                                     3540
gagtgacget etgegeatet geaaggaeta tgtgeeeage eagetggagg etetgeagga
                                                                     3600
agaatatgag cgggaagcta ctaagaaggg ggccaggggt gtggagggat ttgtggaaca
                                                                     3660
agetegaeae tgggageagg etggagagta eageegtgee gtggaetget aceteaaagt
                                                                     3720
gcgagactct ggaaacagcg gcctggcgga gaagtgctgg atgaaggcag ctgaactctc
                                                                     3780
catcaagttt ctgcctcccc aacgtaatat ggaagtcgtt ctggctgtag gaccccagct
                                                                     3840
gattggaatt ggaaagcaca gtgcagctgc agagctctat ctgaatctgg accttgtcaa
                                                                     3900
ggaagcaatc gatgctttca tcgagggtga ggagtggaac aaggcgaagc gtgtagctaa
                                                                     3960
ggagttagat cccaggtatg aagactatgt ggagcagcat tataaagagt tcctcaagaa
                                                                     4020
tcagggcaaa gtggactcgc tggtgggtgt ggatgtgata gctgctttgg ccctgtatgt
                                                                     4080
ggagcagggc cagtggggac aagtgcattt gaaacagcta ccaagcagaa ctacaagatt
                                                                     4140
ctgcacaagt atgtggcttt gtatgcaact cacttgatcc gggagggtag ctctgcccag
                                                                     4200
gcattggccc tgtatgtaca gcacggagcc cctgctaacc cacagaactt caatatctac
                                                                     4260
aaaaggatct tcactgacat ggtgagctct cctggaacca actgtgccga ggcctatcat
                                                                     4320
```

```
agetgggetg atettegaga tgteetette aacetggetg tgetgtetee eteetetagt
                                                                4380
gtgaaaacct ggtgaagtcc agtgaggcaa actctccagc ccatgaggag ttcaagacga
                                                                4440
tgctgctgat cgctcattac tatgccacgc gctctgcagc ccagagtgtc aaacagctgg
                                                                4500
aaaccqtqqc tgccaggctt tctgtttcac tcttgcgtca cacccagcta ctacctgtag
                                                                4560
acaaagcctt ctatgaagca ggcattgctg ccaaggcagt tggctgggat aacatggcat
                                                                4620
tcatcttcct caatcgcttt ttggacctga ccgatgcaat cgaggaaggg actctagatg
                                                                4680
gccttgacca ctctgatttt caggatacag acattccctt tgaggtgcca ctcccagcta
                                                                4740
agcagcatgt accggaggct gagagagaag aggttcgaga ctgggtgctt acagtctcca
                                                                4800
tggaccagcg gctggagcag gttctgcctc gggatgacgc gtggcgccta cgaggcctcc
                                                                4860
4920
ctgaggaaca aaattgaatt taagcggcca gggaaggctg ctaacaaqqa caactqqaat
                                                                4980
aaattcctta tggccatcaa gacctcccac agcccagtgt gccaggacgt gctgaaattc
                                                                5040
atcagtcagt ggtgtggagg gctccccagc accagctttt cctttcagta gttggtagag
                                                                5100
ctgaggaaga gttagggcct ctccctcatt aaagttttat aaataaaaaa aaaa
                                                                5154
```

```
<210> 5646
<211> 1690
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1691)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1654)...(764)
<223> similar to gi563377 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5646
60
aacccggccc cggaatttat ttttgggggc ccaaaaaaaa aaaatttact ttcccacccc
                                                                  120
cgggcgttaa aattggttcc tttaaaaggg ccccccttt ttttttttt gtgggtgtta
                                                                  180
gacatcaact ctacatttat tgcagtcctt taagtctatg acggcggggc agccgctgac
                                                                  240
agcatgcaga gcaagttagg aaaaaccgag gccctgtggg aacagcaacg cgggctccag
                                                                  300
ccaggetete gteetegeag ecteceacaa gaeetgggge teagggeage egetteecea
                                                                  360
cccagcacag cagcagaggg gccctagagc ccccacagaa aggactgtcc cagcctcggg
                                                                  420
agcaagagat ggctccctcc ggacgggcct catccaactc cgccctggag tgtggctgga
                                                                  480
aggaagggac agagaaagaa gggacagagg aaaggggctg tcccagccca agaaggcagt
                                                                  540
tecaetggga agteagteag gteeggegge agegetteet etggeaggge egaggetege
                                                                  600
gactgctggg gtgggcggag gtcgctgcct ggggatcgga cactggagcc ttgcggcggc
                                                                  660
tgcaactcat gctcaggacc cagcccagct tgttgtgtag cacctgcttg aggcccggcg
                                                                  720
gcagcggcag accetecage gtgteteceg agtetggeeg eagetggege aggeggtgge
                                                                  780
agcacaggta ctggagggaa gtggcgctgg cacaggagcg ggtgaccttc atgctgctcc
                                                                  840
gggccgccgt ggagcacacc atcgggtaga atctcttgtt ctgcagcttg gtggctgcca
                                                                  900
cacctggaag ggagggccc agcctataca cttcctgttc ttgaaaaagg tgagtgtgcc
                                                                  960
gtgccaggtg tccaggtgca cgccaatgat ggagccctgg ccgaaccgcg acgagaagct
                                                                 1020
ggtcttgtcg cccttgtggt ggaggaggcc cgtgtaggag aggccccagc tgtcctcatc
                                                                 1080
```

```
cctgcccagc aggctgcaga acgtgtggcg gtatttgtcc aggtccacat ccgacgtccc
                                                                     1140
gatgcccacc atcatgtcgg tgccgtagac gggagaggtc atcttgatct cccagaagtg
                                                                     1200
ctggccctcc cccagctcct tggtgccccg gatggccgct gtgccgcaqc tgtactccat
                                                                     1260
gtggaagctg accttacggt tgtcacagct cagcagggtg gctgatgact tatttaagtc
                                                                     1320
atcocagaco cagtogaaat actogtotto ototoogoag oggoagtooc tgocoogqtq
                                                                     1380
ggccgagtgc aggctgctac agaaggaggc ctcgctctqc ccaqcacaqt cacaqaaqqa
                                                                     1440
ctcgccggtc acgggcaccg cactggggat qqatqqcqqc aqcqtqqaqt actcqqqqtc
                                                                     1500
ggagtccgag tcgctgtgct gcccatcaga gtcgtagccc cagttagtqq aqcctqctaq
                                                                     1560
agccacggcc cgggcatctg cgtctcggcg ggctgcactc aggacgaagt gccaggccct
                                                                     1620
gctgttccgg gggcgtctgg ccatggtgga aagaatctgc agcacnccct gcgcntccgc
                                                                     1680
cddcccddcc
                                                                     1690
```

```
<210> 5647
<211> 2203
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (769)...(1907)
<223> similar to gi5912057 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5647 gacccacgcg ttcgcccacg cgtccgccca cgcttatgct ctattatatt aactctttct 60 tacctttttt tctgaacttc taggccttct ctttccagaa ctggtggaag acaaatgaaa 120 cggccaagat ggtaagaaac aagccgcatt tctccttggg gagactgata atttaaaagg 180 tttgttgtgt caaaaacatt cccagcttca tcaccaaccc tttccttcca cctctgccca 240 ctggagacca cttatatccc gaagcggacg cggcagctga agtcaggaaa ccatgcatca 300 cattagcagg agccaactgc agactttaaa ctccgttcaa catgtggatg cggcagagaa 360 atgacctgtc cagacaagcc ggggcagctc ataaactggt tcatctgctc cctgtgcgtc 420 ccgcgggtgc gtaagctctg gagcagccgg cgtccaagga cccqqaqaaa ccttctqctq 480 ggcactgcgt gtgccatcta cttgggcttc ctggtgagcc aggtggggag ggcctctctc 540 cagcatggac aggcggctga gaaggggcca catcgcagcc qcqacaccqc cqaqccatcc 600 ttccctgaga tacccctgga tggtaccctg gcccctccag agtcccaggg caatgggtcc 660 actictgcago coaatgtggt gtacattaco ctacqctcca aqcqcaqcaa qccqqccaat 720 atccgtggca ccgtgaagcc caagcgcagg aaaaagcatg cagtggcatc ggctgccca 780 gggcaggagg ctttggtcgg accatccctt cagccgcagg aagcggcaag ggaagctgat 840 gctgtagcac ctgggtacgc tcagggagca aacctggtta agattggaga gcgaccctgg 900 aggttggtgc ggggtccggg agtgcgagcc gggggcccag acttcctgca gcccagctcc 960 agggagagca acattaggat ctacagcgag agcgcccct cctggctgag caaagatgac 1020 atccgaagaa tgcgactctt ggcggacagc gcagtggcag ggctccggcc tgtgtcctct 1080 aggagcggag cccgtttgct ggtgctggag gggggcgcac ctggcgctgt gctccgctqt 1140 ggccctagcc cctgtgggct tctcaagcag cccttggaca tgagtgaggt gtttgccttc 1200 cacctagaca ggatcctggg gctcaacagg accctgccgt ctgtgagcag gaaagcagag 1260 ttcatccaag atggccgccc atgccccatc attctttggg atgcatcttt atcttcagca 1320 agtaatgaca cccattcttc tgttaagctc acctggggaa cttatcagca gttgctgaaa 1380 cagaaatgct ggcagaatgg ccgagtaccc aagcctgaat caggttgtac tgaaatacat 1440 catcatgagt ggtccaagat ggcactcttt gattttttgt tacagattta taatcgctta 1500 gatacaaatt gctgtggatt cagacctcgc aaggaagatg cctgtgtaca qaatqqattq 1560

```
aggccaaaat gtgatgacca aggttctgcg gctctagcac acattatcca gcgaaagcat
                                                                     1620
gacccaaggc atttggtttt tatagacaac aagggtttct ttgacaggag tgaagataac
                                                                     1680
ttaaacttca aattgttaga aggcatcaaa gagtttccag cttctgcagt ttatgttttg
                                                                     1740
aagagccagc acttacggca gaaacttctt cagtctctgt ttcttgataa agggtattgg
                                                                     1800
gaaagtcaag gaggtagaca aggaattgaa aagcttatcq atgtaataga acacagagcc
                                                                     1860
aaaattctta tcacctatat caatgcacac qqqqtcaaaq tattacctat qaatqaatqa
                                                                     1920
caaaagaatc ttctggctag ggtgttagat atatttatgc atttttggtt ttgttttaa
                                                                     1980
atcaagcaca tcaacctcaa gcccgtttag caatgaggca gtgtagatga atacgtaaaa
                                                                     2040
taaatgactt taaccaagta gctataatgg gacttagcac tgtatgcata cttaaaaagg
                                                                     2100
ttttgaaaaa caaactactt gagaaatatt tgtttatatt tttctctaac atcatgctat
                                                                     2160
gtgtcagtct gaacatctga caacagaaat ttcagttatt att
                                                                     2203
```

```
<210> 5648
     <211> 1100
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (977)...(59)
     <223> similar to gi5524927 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5648
tttttttttt ttggggcagc gggggtcttt attcgtcaga ttttccttct tqqqctaatt
                                                                       60
cccaagtttt ggcaagggaa agtcaataaa gtgttggtaa ttgcaaaggt ccagaatggc
                                                                      120
aagcagaccc agtggggcca gcagcccttc cctggatagg gctccagggt ccttcactgg
                                                                      180
aggaagatcc ttggtacccc tgctctctcc aaggctggga ctagtgttcc tggttgtggc
                                                                      240
caggtgtgca gtggttgtga cagcagatgg tcttggcttg gtcctagcag aggctgtgac
                                                                      300
cccatacatg ggcctgatgg tgccgaaagg cctggcgtga gcatccaccc accgcagcag
                                                                      360
ggcctgtggt ctccactgac agatgctgag cagggccagg acatcaccct cagccgtgtg
                                                                      420
cgagtctgga ggggactgcc catacaggcg agtgtagatg ctgcctaggc tgtagctctt
                                                                      480
ccttgggccg tgttctgagg ggctgcttgc tcgctccagg gccttcagcg cagtgatgct
                                                                      540
atccacacag aaggcaccat ccagagcact gqtqaqqccc aqcataqcca qctctqcttq
                                                                      600
gagcaggggg aagtcgtagc ggtcaccatt gtgtgccacc aggcaccagg gctgtggctg
                                                                      660
gcgccgcagg aaggctagga gcaggttggc caggttgtca tcaaaacatt gacgcccatg
                                                                      720
egetgecage acagetgtge teagacetgt gatetegetg getgeaggge tgeaggeett
                                                                      780
ccccggagcc acacacaggg agagcttgtc taccacacgc ggtggtggag gaactgtggg
                                                                      840
aggtggcccc tgagaggtgg gggggctctc cagggcacat ctgtggacag ccagcaggca
                                                                      900
cagctccgtg accttgggct gggagaaggg caagccagtg gcctccatgt cgaaaaagat
                                                                      960
gagggtctgc atgggccccg ggggcagggc ctqcqaqccc atggttqqqt acqtacctqc
                                                                     1020
tgctgagccg tagcaggcag gcaggcaggc agtagtgact cggctgcacg ctctcccgcg
                                                                     1080
gctctcgccg gacgcgtggg
                                                                     1100
```

<210> 5649 <211> 1636

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (524)...(1397)

<223> similar to gi4091782 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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                                                                       60
cagaggccgg gaagctgccc ctaccgctac ccccacggct qqactqqttt qtqcacaccc
                                                                      120
agatgggcca gctggcccaa gacggggtcc ccgagtggtt ccatggtgca atctcaagag
                                                                      180
aggatgctga gaacttgctg gagtcacagc cactgggatc ctttctcatc agggtcagtc
                                                                      240
acagccatgt gggctacaca ctctcctaca agtaaggcct gggccgggat ccagggcagg
                                                                      300
ggcaggtggg ctcttgggtt tccttggagg gggcaagggg tgcttcatgt catagcttct
                                                                      360
cagaaagcag cagtaactga ggctgtggat ctgagaacgg gagctgctag ccaagcaatg
                                                                      420
agtgaagctt ttgtccgtag tggcatgttt tatctgaggc cagcctttgt actcctgtgt
                                                                      480
tataaatggg ggaaactgag gcacagcgag gttagtaacc tgctgggtgt tgcatggcca
                                                                      540
gtgagtgaag aagcctgcat gggaacctgg ggtagtctgg ctgtagcagt gacgctgccg
                                                                      600
gcccaagggc tggggacttg gggcagggat gagggggagt aggatgtccc agccccgca
                                                                      660
gtgtctccgc agagcccaaa gcagctgctg ccatttcatg gtgaagctct tggatgatgg
                                                                      720
gactttcatg atccccgggg agaaggtggc ccacacctcg ctggacgccc tggtcacctt
                                                                      780
ccaccagcag aagccaattg agccgcgcag ggagctgctg acacagccct gcaggcagaa
                                                                      840
ggatcccgca aacgtggatt acgaggatct cttcctctac tccaacgcag tggccgagga
                                                                      900
agctgcctgc ccggtgtctg cccctgagga ggcctcccca aagccagtcc tgtgtcacca
                                                                      960
atcaaaggaa aggaagccgt cagcagagat gaacagaata accaccaagg aagccacttc
                                                                     1020
ctcctgcccc ccaaaatccc ctcttggaga gacccgccag aaactctgga ggagcctcaa
                                                                     1080
aatgctcccc gagagaggcc agagggtccg gcagcagcta aaaagccacc tcgccactgt
                                                                     1140
gaacttgtcg tcactcttgg atgtccggag atccacggtg atctcaggcc ctgggaccgg
                                                                     1200
aaaaggcagc caagatcact caggggatcc cacctcgggg gacagaggct acacggatcc
                                                                     1260
ctgtgtggcc acatctctca aaagcccctc acagccccag gcaccaaaag acagaaaggt
                                                                     1320
ccccaccagg aaggccgaga ggtcggtcag ctgcattgag gtgaccccag gggacaggag
                                                                     1380
ttggcaccaa atggtagtga gagccctatc ctcccaggag tccaagccag agcaccaggg
                                                                     1440
cttggcagag cctgagaacg accagctccc ggaggagtac caacaaccgc caccctttgc
                                                                     1500
ccctgggtac tgctagagaa caggtccacc ctggctctgg gactcgctgc caggggctgc
                                                                     1560
cacactectg aatgeettaa catttettee atggeeceae accatggeat eegggggtet
                                                                     1620
tccgggaacc cgggaa
                                                                     1636
```

```
<210> 5650
<211> 5221
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (5105)...(1520)

<223> similar to gi452755 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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<400> 5650
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                                                                      60
acagaagcaa ggcagcacca tagtcttccc agccaaggtg gaagtgcctc tggttcctcc
                                                                     120
agcaatteee actggtgtta teataaetea acagtetgtt geaateagtt gtagaaagge
                                                                     180
acagagtgac agctggaatg caaagaaatg tgcacaaccc agagctctgt cagccttgcc
                                                                     240
aaaactcaag tgcccccatg ggagggtctt gcaacatatg ttctgttgag caaagaggtt
                                                                     300
gcaaaccaag cggttattgc aataaacacc acttgtgaca aacaaagttt gtaagtttaa
                                                                     360
atttattttt taaaaatget tgtetteete aetagacaat caactetatg agggeagaga
                                                                     420
ctatgtcacc actgtcccac cagcccctgg cacacagtag gtactcaata aatatatgtt
                                                                     480
540
tgtgacccag ctgaagtgtg agtaggaaca ttctcttatt atgggtggag gaaagagaga
                                                                     600
ggagattgag aaaataagat aaaatacatt gatgcgcatc atttttggtg ttcgaaaagt
                                                                     660
aggattgaat taggactaat aaatctagag aattttacct ctttcaatgc ccaagccaca
                                                                     720
cttttctatc actttgaaac cgaaaaagta aatactttcc caacatttgc tttgctgggt
                                                                     780
aggaaatggc tttaataaaa atgccatctc taagttgcca tggcatcatt aaaagaaagg
                                                                     840
attgtcatgc ccagggtcca gaacttgaag ggtggcaggc accagcaagc accatagctc
                                                                     900
tgaatgggcc tgccttacag gtcctcactc caacactgct cacttcttcc agcttgaaaa
                                                                     960
tggagaacat gttcacaccc tgggttgtaa gtaggaagga actctgatca gcaagaagct
                                                                    1020
tgcagaggac aatatgaggc aatagtattt tactggccac agtgtgactg ggttgcactc
                                                                    1080
tgttctgaca ttaggaagaa tttcatgcct gggcaaagtc aaagtttttt cctttagtca
                                                                    1140
cattactcaa agaataagtt gactatatcc caacagcact tgtccaaatt ccaggactcc
                                                                    1200
acttacgact attatgaggc aaacatctgc ctgtgcagtt tgtctttcca tccagtctat
                                                                    1260
tetttggggt ccagateett gateattete acaeccagtg etatetgeet cattgeccag
                                                                    1320
catcaggaag caaggagtat ggtgcaataa gacaaccacc tggccatggg atcaggaatg
                                                                    1380
gggtcaggtc agttgacctg agcataccca ttaaacatgt tcaaatgtcc ccatcccacc
                                                                    1440
cactcacatg acatggctcc cgagccctga gatctgtatc ccaaqaacct cagttqaqaa
                                                                    1500
atatttatgg cagcttcact gttgctcaag agcctgggta ttgtagcagc ctgggggcag
                                                                    1560
gttgtcccta atgttctcca agttcttcac atcagccaga atcccatcta tgcttgtctc
                                                                    1620
cagcaaatgg aggtggcccc tctgctgacg tgccctctct tccagctctg acatcatggg
                                                                    1680
ccgcagttgg ctgttgatct gggtcttggc tcgggaaagc ttctgctcca gtaagaccag
                                                                    1740
cccctcttca tctacactga gaggctggtc catcagatgc aggaggccgt ctaatgtgtt
                                                                    1800
gagtgtgtct tggattgtaa ccccagcgtt cttggctctg gtatcaacct tctgggcttc
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                                                                    1920
ctctccttcc acttccctca tctcactctt cagagaggcc agtccctttt ccatggccaa
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ggctccatct gctgtcacat tggcttccaa gttcagactc ccaatctcct gttcaatctc
                                                                    2040
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gctccccagg gctctttctg cttgctgggt cttgtcactg gcatctgaaa ccttctqqct
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actcagtgct tcttgtgctc tgcttttagc aagattggca cgggaaagca gctgatctga
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cagattette tgtgtacget tgaacteate catatgeetg gttaceagge ttgagagtga
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atccgctttt tgtttgatcc tctttgcttc ttccacctga aaggactgat cactgactcc
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ctgaagccga gacactgaat ccaggaggcg gagactgtgc tgataagacc tatctgcttc
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                                                                    2820
ctgagccaga cttttaaagc catttggccc cacgtagtgg tctgaggcag gaatgttagt
                                                                    2880
gtttcccaag gaagcttcac tttctgccag gctcagctgc atctgagtga tgagcctgtg
                                                                    2940
agtatecega acteggitet ggtaetgaet teecagagee egaactettt ceacagteat
                                                                    3000
cttgaggtca tccaggcggc tctggtagct gttctcttgg ctcctcacct tggccaactg
                                                                    3060
gagaccaagg gatctgctag caccttctga aatctgggca tctctcagaa tgtcctgaag
                                                                    3120
ggcctgctca gcctgctgca tcctgccttc cagctctgta tcaggtacta ctccatcacc
                                                                    3180
```

```
accetgagee titgaaatea gggeeteeat tetetgaage tgetgeataa aetgateeat
                                                                     3240
ctgaatcttc acttgattat agcaagctgg acagctgaat gctccatgct cacagttggg
                                                                     3300
gccaccaaat cctggcttgc aaacacaggt gccatcactt cgacatcctt aacaggctct
                                                                     3360
gagccccatg gggttacagt tgcaagctcg aacacttgtt tgctgggttg ggagccaatg
                                                                     3420
ggtccccgaa gtagcctgct tcgcactggt cgcagtaaat gccggctgtg ttgtggatac
                                                                     3480
acticaaaca cctgcctgtc aqccqqtcaa aattcccaqa qqcactqqqq tccacattqt
                                                                     3540
tgttgcattg acagggctga caaggcctca ctgggccatg ttcaccaaag gggtccccaa
                                                                     3600
agtagccatc agcacagagc tcacagcggg caccggtgac cccgggaggg cagttattqc
                                                                     3660
acaccacctc ctccgtctcc ggcatcactg agcagctgaa cccgttatga cagggacatg
                                                                     3720
gcttgcagct gcgggggtcg tgcggatcgt tgtagaaacc aattgggcag tcagcacact
                                                                     3780
caatgtcagg atteteatee cetgaataac aateteetgt gtetggatea caggeeeete
                                                                     3840
ccccttgaca gttacaagga atacaggtgc caaaaggccc cagtctcgct gaatctctct
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tgtagccaga agcacaatcc tggcagaatt gccccttgta cccaacagga catatacact
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gttcaacccc aggttgctgg gcttccagag acaggccggg ctgaaatcag ggtcacattg
                                                                     4020
tcaatgtacc cagtactgta ttctccatat gtagctcgga tgcggagggc tgtgagattc
                                                                     4080
cgcagtaacc ttcgatactc aaagtaactt caggctgggg gctccaatta ttgcttggat
                                                                     4140
gctcatttaa cctgaatgtg taagtcttgg tgagcccaca aggcagtgtc ttgccaagtg
                                                                     4200
gcatcaaggg agctgtgatc cgtagaccag caccttccag aatcacatca tgggcagatg
                                                                     4260
ggtgtctgcc tcctctgtcc acacggtagt caaaggacag gctttgacca tagctcacct
                                                                     4320
gttgattccc aagaaatttg gcaggagcca caaaatagac agggtctagt cgttgggctg
                                                                     4380
agctaaacac atcttgatgg cgctgtgacc attggagctt tgcaggagac ccatttcgtt
                                                                     4440
ggacagcctt ccagccatca acatcttgat gaaaggtaga ggtgatctta tggacactgt
                                                                     4500
attotgcaga gotgcggcag otggotgaat goocatagca gaaacactgg gtacagcoot
                                                                     4560
cagggttccc cccatccaga ttatagtaac ctgatcgaca cctatcacag cgttctccag
                                                                     4620
tgacagctgg cttgcagaca cagcggcccg cgtcacaggg ccctgcgatg ccagctgggt
                                                                     4680
cacagtcaca cttggagtct agcagtctct ggtcttgggt gcaccccgca tccgtgagca
                                                                     4740
tgtggaagcc tggcagacat cggtcgcatc tggctcctgt cacacctggt ttacagctgc
                                                                     4800
accgtccgga gttgtcacat cgagcactaa gagaaccttt ggagttacaa ttgcagggca
                                                                     4860
aacagcggtc cctttctctg tgccggtaaa agccattctt gcacttctcg cagtgaatgc
                                                                     4920
catcagtgtt gtcattgcag ttgaggcagc ggaatccatt accagtttgt ctgtgaagtt
                                                                     4980
cccgatcaaa gatacactgc ctggacttcc cattgcaatc acagacttcc ctcctggagg
                                                                     5040
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                                                                     5100
geatggeggg geegggeege teagtetetg teteegetge aggggteget geeeggegee
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                                                                     5221
```

```
<210> 5651
<211> 5553
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (52)...(5295)
<223> similar to gi2347136 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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ctctgggggc tgatctgggc atccagcttc ttcaccttat ctctgcagaa gcccaggttg 120
```

ctcttgttct ctccttctgt ggttcatctg ggggtccccc tatcggtggg ggtgcagctc 180 caggatgtgc cccgaggaca ggtagtgaaa ggatcagtgt tcctgagaaa cccatctcgt 240 aataatgtcc cctgctcccc aaaggtggac ttcaccctta gctcagaaag agacttcgca 300 etecteagte tecaggtgee ettgaaagat gegaagaget gtggeeteea teaacteete 360 agaggccctg aggtccagct ggtggcccat tcgccatgac taaaggactc tctgtccaga 420 acgacaaaca tccagggtat caacctgctc ttctcctctc gccgggggca cctctttttg 480 cagacggacc agcccattta caaccetgge cagegggtte ggtacegggt etttgetetg 540 gatcagaaga tgcgcccgag cactgacacc atcacagtca tggtggagaa ctctcacqqc 600 ctccgcgtgc ggaagaagga ggtgtacatg ccctcgtcca tcttccagga tgactttgtg 660 atcccagaca tctcagagcc agggacctgg aagatctcag cccgattctc agatggcctg 720 gaatccaaca gcagcaccca gtttgaggtg aagaaatatg tccttcccaa ctttgaggtg 780 aagatcaccc ctggaaagcc ctacatcctg acggtgccag gccatcttga tgaaatgcag 840 ttagacatcc aggccaggta catctatggg aagccagtgc agggggtggc atatgtgcgc 900 tttgggctcc tagatgagga tggtaagaag actttctttc gggggctgga gagtcaaacc 960 aagctggtga atggacagag ccacatttcc ctctcaaagg cagagttcca ggacgccctg 1020 gagaagctga atatgggcat tactgacctc caggggctgc gcctctacgt tgctgcagcc 1080 atcattgagt ctccaggtgg ggagatggag gaggcagagc tcacatcctg gtattttgtg 1140 tcatctccct tctccttgga tcttagcaag accaagcgac accttgtgcc tggggcccc 1200 ttcctgctgc aggccttggt ccgtgagatg tcaggctccc cagcttctgg cattcctgtc 1260 aaagtttctg ccacggtgtc ttctcctggg tctgttcctg aagtccagga cattcagcaa 1320 aacacagacg ggagcggcca agtcagcatt ccaataatta tccctcagac catctcagag 1380 ctgcagctct cagtatctgc aggctcccca catccagcga tagccaggct cactgtggca 1440 gccccacctt caggaggccc cgggtttctg tctattgagc ggccggattc tcgacctcct 1500 cgtgttgggg acactctgaa cctgaacttg cgagccgtgg gcagtggggc caccttttct 1560 cattactact acatgateet atecegaggg cagategtgt teatgaateg agageecaag 1620 aggaccctga cctcggtctc ggtgtttgtg gaccatcacc tggcaccctc cttctacttt 1680 gtggccttct actaccatgg agaccaccca gtggccaact ccctgcgagt ggatgtccag 1740 gctggggcct gcgagggcaa gctggagctc agcgtggacg gtgccaagca gtaccggaac 1800 ggggagtccg tgaagctcca cttagaaacc gactccctag ccctggtggc gctgggagcc 1860 ttggacacag ctctgtatgc tgcaggcagc aagtcccaca agcccctcaa catgggcaag 1920 gtctttgaag ctatgaacag ctatgacctc ggctgtggtc ctgggggtgg ggacagtgcc 1980 .cttcaggtgt tccaggcagc gggcctggcc ttttctgatg gagaccagtg gaccttatcc 2040 agaaagagac taagctgtcc caaggagaag acaacccgga aaaagagaaa cgtgaacttc 2100 caaaaaggcga ttaatgagaa attgggtcag tatgcttccc cgacagccaa gcgctgctgc 2160 caggatgggg tgacacgtct gcccatgatg cgttcctgcg agcagcgggc agcccgcgtg 2220 cagcagctgg actgccggga gcccttcctg tcctgctgcc aatttgctga gagtctqcqc 2280 aagaagagca gggacaaggg ccaggcgggc ctccaacgag ccctggagat cctgcaggag 2340 gaggacctga ttgatgagga tgacattccc gtgcgcagct tcttcccaga gaactggctc 2400 tggagagtgg aaacagtgga ccgctttcaa atattgacac tgtggctccc cgactctctg 2460 accacgtggg agatccatgg cctgagcctg tccaaaacca aaggcctatg tgtggccacc 2520 ccagtccage teegggtgtt eegegagtte cacetgeace teegeetgee catgtetgte 2580 cgccgctttg agcagctgga gctgcggcct gtcctctata actacctgga taaaaacctg 2640 actgtgagcg tccacgtgtc cccagtggag gggctgtgcc tggctggggg cggagggctg 2700 gcccagcagg tgctggtgcc tgcgggctct gcccggcctg ttgccttctc tgtggtgccc 2760 acggcagccg ccgctgtgtc tctgaaggtg gtggctcgag ggtccttcga attccctgtg 2820 ggagatgcgg tgtccaaggt tctgcagatt gagaaggaag gggccatcca tagagaggag 2880 ctggtctatg aactcaaccc cttggaccac cgaggccgga ccttggaaat acctggcaac 2940 tctgatccca atatgatccc tgatggggac tttaacagct acgtcagggt tacagcctca 3000 gatccattgg acactttagg ctctgagggg gccttgtcac caggaggcgt ggcctccctc 3060 ttgaggcttc ctcgaggctg tggggagcaa accatgatct acttggctcc gacactggct 3120 getteceget acetggacaa gacagageag tggageaeae tgeeteeega gaceaaggae 3180 cacgccgtgg atctgatcca gaaaggctac atgcggatcc agcagtttcg gaaggcggat 3240 ggttcctatg cggcttggtt gtcacggggc agcagcacct ggctcacagc ctttgtgttg 3300 aaggteetga gtttggeeca ggageaggta ggaggetege etgagaaaet geaggagaea 3360 tctaactggc ttctgtccca gcagcaggct gacggctcgt tccaggacct ctctccagtg 3420 atacatagga gcatgcaggg gggtttggtg ggcaatgatg agactgtggc actcacagcc 3480 tttgtgacca tcgcccttca tcatgggctg gccgtcttcc aggatgaggg tgcagagcca 3540

```
ttgaagcaga gagtggaagc ctccatctca aaggcaaact catttttggg ggagaaagca
                                                                     3600
agtgctgggc tcctgggtgc ccacgcagct gccatcacgg cctatgccct gacactgacc
                                                                     3660
aaggcccctg cggacctgcg gggtgttgcc cacaacaacc tcatggcaat ggcccaggag
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actggagata acctgtactg gggctcagtc actggttctc agagcaatgc cgtgtcqccc
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accccggctc ctcgcaaccc atccgacccc atgccccagg ccccagccct gtggattgaa
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accacageet aegeeetget geaceteetg etteaegagg geaaageaga gatggeagae
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caggctgcgg cctggctcac ccgtcagggc agcttccaag ggggattccg cagtacccaa
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gacacggtga ttgccctgga tgccctgtct gcctactgga ttgcctccca caccactgag
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gagaggggtc tcaatgtgac tctcagctcc acaggccgga atgggttcaa gtcccacgcg
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ctgcagctga acaaccgcca gattcgcggc ctggaggagg agctgcagtt ttccttqqqc
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agcaagatca atgtgaaggt gggaggaaac agcaaaggaa ccctgaaggt ccttcgtacc
                                                                     4200
tacaatgtcc tggacatgaa gaacacgacc tgccaggacc tacagataga agtgacagtc
                                                                     4260
aaaggccacg tcgagtacac gatggaagca aacgaggaga ctatgaggac tatgagtacg
                                                                     4320
atgagettee ageeaaggat gaceeagatg eeeetetgea geeegtgaea eeeetgeage
                                                                     4380
tgtttgaggg tcggaggaac cgccgcagga gggaggcgcc caaggtggtg gaggagcagg
                                                                     4440
agtccagggt gcactacacc gtgtgcatct ggcggaacgg caaggtgggg ctgtctggca
                                                                     4500
tggccatcgc ggacgtcacc ctcctgagtg gattccacgc cctgcgtgct gacctggaga
                                                                     4560
agctgacctc cctctctgac cgttacgtga gtcactttga gaccgagggg ccccacgtcc
                                                                     4620
tgctgtattt tgactcggtc cccacctccc gggagtgcgt gggctttgag gctgtgcagg
                                                                     4680
aagtgccggt ggggctggtg cagccggcca gcgcaaccct gtacgactac tacaaccccg
                                                                     4740
agcgcagatg ttctgtgttt tacggggcac caagtaagag cagactcttg qccaccttgt
                                                                     4800
gttctgctga agtctgccag tgtgctgagg ggaagtgccc tcgccagcgt cgcgcctgg
                                                                     4860
agcggggtct gcaggacgag gatggctaca ggatgaagtt tqcctqctac tacccccqtq
                                                                     4920
tggagtacgg cttccaggtt aaggttctcc gagaagacag cagagctgct ttccgcctct
                                                                     4980
ttgagaccaa gatcacccaa gtcctgcact tcaccaagga tgtcaaggcc gctgctaatc
                                                                     5040
agatgegeaa etteetggtt egageeteet geegeetteg ettggaaeet gggaaagaat
                                                                     5100
atttgatcat gggcatgggt ctggatgggg ccacctatga cctcgaggga caccccagt
                                                                     5160
acctgctgga ctcgaatagc tggatcgagg agatgccctc tgaacgcctg tgccggagca
                                                                     5220
cccgccagcg ggcagcctgt gcccagctca acgacttcct ccaggagtat ggcactcagg
                                                                     5280
ggtgccaggt gtgagggctg ccctcccacc tccgctggga ggaacctgaa cctqqqaacc
                                                                     5340
atgaagetgg aageaetget gtgteegett teatgaacae ageetgggae eagggeatat
                                                                     5400
taaaggcttt tggcagcaaa gtgtcagtgt tggcagcgaa gtgtcagtgt gtgttgctag
                                                                     5460
ggctgagagc agtgcccctg cccgatgcag ttctgggcag gccaggttga cataacctta
                                                                     5520
gactctctga gccctgatga cccttgggct gtt
                                                                     5553
```

```
<210> 5652
<211> 1669
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1643)...(1413)
<223> similar to gi288145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5652
gcgaccacag ggctgaggtc agggctagga ttccggtgtc tctacgtagg ttgcttgaat 60
ggggggcacc ctggcatgga cgctgctgtt gccgctgctg ctgcgggagt cagacagcct 120
agaaccgtcg tgcaccgtgt cctccgcgga tgtggactgg aacgcggagt tcagtgccac 180
```

```
gtgcctgaat ttcagtggcc tcagcctgag cctgcctcac aaccagtctc tgcgggccag
                                                                    240
caacgtgatt ctccttgacc tgtctgggaa cggcctgcga gagcttccag tgaccttctt
                                                                    300
tgcccacctg cagaagcttg aggtcctgaa cgtgctacgc aaccccttgt ctcgtgtgga
                                                                    360
tggggcgctg gccgcccgct gtgaccttga cctgcaggcc gactgcaact gtgccctqga
                                                                    420
gtcctggcac gacatccgcc gagacaactg ctctggccag aagcctctgc tctgctggga
                                                                    480
cacaaccage teccageaca acetetetge etteetggag gteagetgeg eeeetggeet
                                                                    540
ggcctctgca actatcgggg cagtggtggt cagcgggtgc ctgcttcttg gacttgccat
                                                                    600
cgctggccct gtgctggcct ggagactctg gcgatgccga qtgqccaqaa qccqqqaqct
                                                                    660
gaacaaaccc tgggctgctc aggatgggcc caagcccggt ttaggcttgc agccacggta
                                                                    720
cggcagccgg agcgcccca agccccaagt ggccgtgcca tcctgcccct ccactcccga
                                                                    780
ctatgagaac atgtttgtgg gccagccagc agccgagcac cagtgggatg aacaaggggc
                                                                    840
tcacccttca gaggacaatg acttttacat caactacaag gacatcgacc tggcttccca
                                                                    900
gcctgtctac tgtaacctgc agtcactggg ccaggcccca atggatgaag aggagtacgt
                                                                    960
gatccccggg cactgagcct aagatgtcct aacctccacc cagaacccct tcagtccctg
                                                                   1020
ctgggtgact cagggcgtcc taacgcctcc atggcctcag tttccccatc tgaagaatgg
                                                                   1080
gtacaggaaa ggattgtcct tgaggcccca ggaagctctg ccgcccctc cctgtccctc
                                                                   1140
atgeegetee teageteeet cageteetag agggggaaga ggagagaeee ceaacaaggg
                                                                   1200
gacaggaggg tcactgtgcc aatcctgtca tcaccctcct gtggatgtac aggcagtgct
                                                                   1260
caataaatgc ttcgaggctg atgaggctgc tggctcaggg tgcgtgggtt cctcaaggtg
                                                                   1320
gggatttetg agttetaaga ecaagtetee atetgagaet eecaaattge teeceaeete
                                                                   1380
1440
tctgtcaccc aggtgggagg gcaaggttgg ggtttaagtt aattgaaacc tcggcttccg
                                                                   1500
gggttaaagg gattttccgg cctaaccctc cggagaagtg gggattacgg aacccgccac
                                                                   1560
catgccgggc taattttggt atttataaaa aaaagggggt ttcgccatgt gggccaggtt
                                                                   1620
ggtttcgaat tcttgaccta aagcgatttg cccgcctggg cctcctgaa
                                                                   1669
     <210> 5653
     <211> 1833
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (71)...(1833)
     <223> similar to gi443940 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5653
tttcgtgccg tccgccgcgg acaagaccct ggcctcaggc cggagcagcc ccatcatgcc
                                                                     60
gagggagcgc agggagcggg atgcgaagga gcgggacacc atgaaggagg acggcggcgc
                                                                    120
ggagtteteg getegeteea ggaagaggaa ggeaaaegtg accqtttttt tqeaqqatee
                                                                    180
agatgaagaa atggccaaaa tcgacaggac ggcgagggac cagtgtggga gccagccttg
                                                                    240
ggacaataat gcagtetgtg cagacecetg etecetgate eccacacetg acaaagaaga
                                                                    300
tgatgaccgg gtttacccaa actcaacgtg caagcctcgg attattgcac catccagagg
                                                                    360
ctccccgctg cctgtactga gctgggcaaa tagagaggaa gtctggaaaa tcatgttaaa
                                                                    420
caaggaaaag acatacttaa gggatcagca ctttcttgag caacaccctc ttctgcagcc
                                                                    480
aaaaatgcga gcaattcttc tggattggtt aatggaggtg tgtgaagtct ataaacttca
                                                                    540
cagggagacc ttttacttgg cacaagattt ctttgaccgg tatatggcga cacaagaaaa
                                                                    600
```

660

720

tgttgtaaaa actcttttac agcttattgg gatttcatct ttatttattg cagccaaact

tgaggaaatc tatcctccaa agttgcacca gtttgcgtat gtgacagatg gagcttgttc

```
aggagatgaa attctcacca tggaattaat gattatgaag gcccttaagt ggcgtttaag
                                                                     780
teceetgact attgtgteet ggetgaatgt atacatgeag gttgeatate taaatgaett
                                                                     840
acatgaagtg ctactgccgc agtatcccca gcaaatcttt atacagattg cagagctgtt
                                                                     900
ggatctctgt gtcctggatg ttgactgcct tgaatttcct tatqqtatac ttqctqcttc
                                                                     960
ggccttgtat catttctcgt catctgaatt gatgcaaaaq gtttcagqqt atcagtqqtq
                                                                    1020
cgacatagag aactgtgtca agtggatggt tccatttgcc atggttataa gggagacggg
                                                                    1080
gagctcaaaa ctgaagcact tcaggggcgt cgctgatgaa gatgcacaca acatacagac
                                                                    1140
ccacagagac agcttggatt tgctggacaa agcccgagca aagaaagcca tgttgtctga
                                                                    1200
acaaaatagg gcttctcctc tccccagtgg gctcctcacc ccgccacaga gcggtaagaa
                                                                    1260
gcagagcagc gggccggaaa tggcgtgacc accccatcct tctccaccaa aqacaqttqc
                                                                    1320
gcgcctgctc cacgttctct tctgtctgtt gcagcggagg cgtgcgtttg cttttacaga
                                                                    1380
tatctgaatg gaagagtgtt tcttccacaa cagaagtatt tctgtggatg gcatcaaaca
                                                                    1440
gggcaaagtg ttttttattg aatgcttata ggtttttttt aaataagtgg gtcaagtaca
                                                                    1500
ccagccacct ccagacacca gtgcgtgctc ccgatgctgc tatggaaggt gctacttgac
                                                                    1560
ctaaaggact cccacaacaa caaaagcttg aagctgtggg agggccacgg tggcgtcgtt
                                                                    1620
cttccttcgc aggtgtttct ggggctccgt ttgttaccca agtgggagca ggtggtttgc
                                                                    1680
ggggcaagcg ttgtgcagag cccatagcca gctgggcagg gggctgccct ctccacatta
                                                                    1740
tcagttgaca gtgtacaatg cctttgatga actgttttgt aagggctgct atatctatcc
                                                                    1800
atttttaat aaagataata ctgtttttga gac
                                                                    1833
```

```
<210> 5654
<211> 855
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (310)...(809)
<223> similar to gi3025832 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5654 tgactgcccg tagaggaaac gacattcgga gctgcgctcc cgcccaqqcc qqccctqccq 60 cgggcctcgt cagccagtaa cagggagcag aggtgggagt tagcgaggcg accacgaaaa 120 cggtgaaggt cggaaccgac agcctcctcc gagaagggca ggagctggga ggagccqca 180 gcggcggcgg cagaaacagc agcggcggcg gcggcggcag ctgggaggag gtggtgacgg 240 tggcaacggc agcgtcgggg acgatggcgc gactcgtggc agtgtgcagg gacggggagg 300 aggagtteec ettegagagg aggeagatte eeetetacat agacgaeace etgaegatgg 360 tgatggaatt tcctgataat gtgttaaatc tcgatggaca tcagaataat ggtgcacagc 420 taaagcagtt cattcagcga catggtatgc ttaagcaaca ggatctaagt attgccatgg 480 tggtgacatc acgcgaagtc ctgagtgcac tttctcagct tgtcccatgt gttggttgtc 540 gtcgcagggt ggagcgtctc ttttcccagc ttgtagagtc tggaaatcct gctcttgaac 600 ccctaacagt agggcccaag ggagtcctgt ctgtaactag aagctgcatg actgatgcaa 660 agaagcttta tacattattt tatgtacatg ggtccaaact aaatgacatg atagatgcta 720 ttccaaaaag taagaagaat aagagatgtc agttgcactc cttagatacg cacaagccaa 780 aacctttggg aggttgatgg atggatgtat gggaactaat gtcgcaggaa tgcagggatg 840 aagtagttat aattg 855

```
<210> 5655
<211> 5663
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(5664)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (5501)...(2237)
<223> similar to gi33942 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters

<400> 5655

tttttttttt ttgatgaaat agataattca ggttgtcatt tataatttta gagtttgctt cacatataca atgctgtgtt acgaaacaat gaacacttt ataaaaaatt tattcacac
```

60 cacatataca atgctgtgtt acgaaacaat gaacactttt ataaaaaatt tatttcacac 120 ttttatacaa atatccacag gtaatttcta atcatgaaat aattttacaa tgctagttag 180 tacaaaaatg tatcaaatgc aaacagacca gtgacttgac ttgagatgac atttttaaca 240 accataaatc taaacaccat aacatctttg tttctttgtt gaaccaccct cccaacaccc 300 ttttcaggac attcatcttt tttttagtaa cacaggtcta aaaacactgt caaagtatca 360 gctccttagc aatctagcaa tctaaacaca ttagggacac aagttcccca agcaagaaac 420 tgagacttta aacactgtta taacctgttt tacagaaatt tttgtaaaca aaatatattt 480 tgtgactaag aattccaaag tacaaccaaa acaacgtcct tagtatttta aggtttaaga 540 tttccgaaaa gaaaaaagcc cccccaaaac aacagtggcc ctacaaactg tgttttattc 600 tttcaaaaca cagacactgc ttatactata tccaaaacaa attagcacct gtttgctgtt 660 gctccccata taacttaaca ttgtgaagca tggtaattaa aaaaaatcag ctttcatatc 720 tattcagtct ctgttgaatg tatagagtaa tcattccacc ccctqccatt tttacaatta 780 aaacacaatt taaagttott gttaaattag coccaaagta atttttggga atacagatag 840 gggaggaaac aaaacaaaa atagaacatc gactcactga ttaactgttt tggtagcaga 900 ttcagtagtc ttatactgga tcagtttgga tccaccatag gcattcacca tttctttcaa 960 gtcctgaata tacagtattt gcagcagtga gtaaaccqca ctagagttca gtgaataaac 1020 ccattttctc caagaattcc tgaatgttac agtatgaaat ccagaaacat tatgcaggct 1080 tctaaagtaa aaaatatcca atgcctgaaa taaacatctt tacagttata attctatttc 1140 ttaaaccttt tgggttgtgg ggtggaggct gtcatgaagg agaggttata gtttatagat 1200 aagttattaa aacaactctc tctggtacat ttataaagat tttctttttg cagtaaataa 1260 tttaggtcaa agtgatgacc tcccatgctc taattctaat tctgattgat taaacccaac 1320 ctgaagggta aactggagac tctttggcct gttagtcaat aacaaaatgg tttgtaaaga 1380 aaagaaaaaa taaataccat atacaaataa gtataactag cattcaagtc tgttgcacct 1440 gtgtgttttt agtgaaaggg agaatgaaac ttgtatgcat ttgacgtgag caggtattca 1500 cacagctagg aaacaggaaa agacggtagg atggcaacat caccttctat tgcaacattt 1560 agtttaaaag acagccactt toogttgaaa acacaactac cocaaatggo atagtottgt 1620 gatgtgggac agctaacgtg atggacgtct gcgcagcagg cccgaggtta ggacggccac 1680 tctgttagtg caggtgagtg taggtgcctc ctcagctaca ctatctggag gatgtcacct 1740 gagtgcaact gggcaggccc ttccccaaca catgatgtaa gtcagccacg ccaaaaacaa 1800 aggcaaccca gaaagttaaa ttacggcagt taaagaaaaa tccattccaa cagttttaaa 1860 tttggctgtg caaaacagga gccttaggct acgtaacaat atccacagtt aaaactgtag 1920 gttcgtactg tgtgtagtca ctctgaaatc agtcctcagg gattgagcag gcttttaaat 1980 ccaaattgaa tttctgagtt ggaaaaagca gtttgggtac tgtgaagctt ttttttttt 2040 aggcccccgc tatgagtagc tttcattttc gttccacttt gtgatccact gttttttttc 2100

aaggttatca atatactttt aatttttgat ctctcgctct tctttccgga tccttacagc 2160 atggtatcgg ggaacactgt catcgtacct agagcgttta aagaatccac acaattacag 2220 aagtagatca atactatgca tcagaagtaa gcctctcttt atcagatggc tgagcatgga 2280 tetcageett gtgatatgtg geateataat gatetttett atttetettg aagaaaceae 2340 acttccatag tataaacact aataaagcaa gcatcaagat cccagcgaga atagccacta 2400 ggatgatcca ccaaggtact cccgaatact gagctacagt ctttgaggga aacacagtca 2460 ctcgaacctg agtgcctgca tttggcagcc tgatattttc ggcagcagca gtcacatcaa 2520 tgaaggctcg catgagaatg tccaagtagt tcagtttgga atattcctct agaaatgtgc 2580 tgttccataa cctcgagcgc aaaataagag acgccttgct gtccagcccc cgcagcgggc 2640 atctgatgtt cacacagttc acgttcacgc tacagttaag agtctggtat tttctttcag 2700 caaataaaga aaattttctg ttatcatcta tctgtttttc agtaatttcc cgtttctttc 2760 ttgagttgtg agactccgtt aggttcaggg agtttatctc cttttgtggc tcacaagtta 2820 ccttttccaa tcctttggat tctactttca ccaaaataaa gcaaccaatt tccaattgct 2880 aatttctttt ggccactgaa tgttcaaggt tgctgtgccg aggtttgtaa gaggtttacc 2940 taagtttatt accetgaatt catactetat taaaetteee actteatett cagattteat 3000 agettgeteg ccaacaactg tacetecaaa atacacetgg gaaggtttag caacteecga 3060 gaccgataaa agcagttcaa taaccacttt tgctttagct gtaattggag ccaaattatc 3120 ttgattgctt gttgtttcta acttcagatt aatatccaga tctggggtgt caaaggtgac 3180 ttcagttgta cttaaaacca aataaaaagt gacatttgaa tttcttttaa aaggatttcc 3240 gageteacag teagettgeg ageeattetg gttggeaaca caacteaact gttteteagg 3300 gaaagccctc agttctctat atgcagaata ggttaaagtg tctggaaacg ttgcaatcag 3360 tttagcctca tgggcatcat cgccatcttt tgtgggattc cttgggttgg aagggctgtt 3420 tgtcactgtt atttctaaag caatatcctt ctgatctttt agaactagtt ctggtacacc 3480 tttttgaatt ggtaaataag aaaatttgtc ttgatttcct tctcggggtg caaaaattta 3540 tattctagtt taagggttgc tgttacatac aatntgtcgt ctcccacatc ccttcttta 3600 agaagtgaac atcaatatga gctgtcttgg gttcatctga attcagaatt ggaagaactt 3660 ctggaagtga attcactcgc ctacgagagc ttggctcttg gatctccact gagggcagtt 3720 atgggaatgg gacgcagttt atctctgata ttatcctgta gccacagggt ttcctccatg 3780 cacactttct gtttctgcct cttcagagtt agttcttgag tatatttggg ctcagaacct 3840 tggtttcgaa actgaactct tgaggatagc ccagattttc ttctttcttt ttcagcttca 3900 agtgtgccca caattgatat tgaaggatta taaccagcgg ggttagcagt atattcaaaa 3960 caggatttaa cctggaggca tatcccacta ggcgccccac acgctgtttt ctggcggagg 4020 tcaattctgt taggagttac tgtgatggtt ttctgaatat taatcacagg ccgggatctg 4080 aaaatagtta ctgaatctga gagggaacca acagcaacat cagggtagga atttcgatca 4140 aggtccatgt ttccagcaat tgaatatcca aaataaggtg atataccctt gagaacctgt 4200 gttggtttgg tatttattcc atttgcagat ccatgataga taaaaacctt tcccaagtca 4260 tcatacggag ctccaactgc aatatctggg tagccatctt gattaatatc tccaatattt 4320 tttactgcaa tgccaaacat agagtccttg ggttccatta agagcgaatt ggcttcacat 4380 tattccatct gccttgctgg ttcatgtaga catacactgc acctccaact tctccatctc 4440 tatcaaaata ctgtggggct ccaataacta tatcttgcca cccatccttg ttgaggtcca 4500 ccaccgccac atcatagcca aatgaagagg ccagaccttc tccatcgaat atgtgctcag 4560 ggaggagatg tgcagacttc atgtctctct tcagcaaaac cacggctcca ctgtgattgg 4620 ctctgggagc accagataca aaagtgatct catctttaga aacaatacct ttccctgagt 4680 ccaaagaaaa acctaagtaa ctgttagcag gaacaggaac gagactttca tcatgctcag 4740 tctctccacc aacttcataa ggcccatctt caaagatgtt catgtcaaaa aaagtgttat 4800 tcttttgctc tacacgaaca atccctttcc agttattaag taccccgggg cttccaaata 4860 caatgttaat ggaaagtctt taggtaaaag taggctggct acaccttgct ggggcaaggg 4920 ccaaatttct catggcctct caatcgccca tcacaaaagc tccaatctcc cccatccata 4980 togttottca atootgagat totgactoag gacataacac ogcoccaaag atgtotoggg 5040 aatccctgct tcgtattaac aatgctgccc tttttttaaa atatcggtta aacaaaatgt 5100 aaacgacctt gcccccctg aaccttggcc tctggaacgg ttgacccccc cacccactga 5160 tcttcccttg cctttcctga cgtgggggtt cagcatcgtt atcaaactcg atccgccgtg 5220 catggccccc gggcggtgga tgtcgcagct tgtacagccc tcccqttctq ttqqqctctc 5280 tgcagtggga agcgcttctg cccgcggggc ccccacggag caacagccgc ttgtcctcgg 5340 gctgcagttt gccagtgcat gggccagcga gaaagccgaa gaggttcccc ggggtctcca 5400 tattttccgg atcacgttgt cctcccgagt gttccaagtt gaaagctgac gcccgagccg 5460 ggacaggagc cccgccgaca ggtagagcaa gcacaggctg cccggcggcg gccatgggcg 5520

```
gacgcacggg gaggggagcc ggggaccctg cagcggccgc cctgcgctcc gggctgggtc
                                                                     5580
cgaggctgcc gcgctgctgc taccgcagcc accttcgcct cctctcgccg ctgcgcccgg
                                                                     5640
ccccacccc gggacggtcg cgc
                                                                     5663
     <210> 5656
     <211> 610
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (8)...(529)
     <223> similar to gi498734 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5656
cggaggaaag ccttttgagt tcaaagaagt gtgtgaaagc cttgagcatt cgaaaaagcc
                                                                       60
tcattagacg gttctacatc cacactggag agaagcccta tqaqtqttqa caqtqtqqaa
                                                                      120
agggttttac cegcatgtea gggeteacaa ggeeecagtg gatteataet ggagagaaae
                                                                      180
cgtatgtatg cgtccaatgt gggaaagcct tttgtcggac cgcaagcctg attcgacact
                                                                      240
ttagcatcca cactggagag aagccctatg aatgcgtgga gtgcgggaag gccttcaacc
                                                                      300
gcaggtcacc cctcacaagg caccagcgga ttcacactgc agagaagtcc cacgaaccca
                                                                      360
tccagagtgg gaacgtttct tgtgagagca cagatctcat tcaacactcc atcatccaca
                                                                      420
ctgagagtag cccagtgagt gcagtgaata tggaaacgcc ttcaattgcc gctcattcct
                                                                      480
cctcactcga catcaacgga ttcatagtgg aagaaaccct accaagcaca gcagatgtgg
                                                                      540
aaaggaagga ataaaaatgc ccaagaccaa acgaaagaag aaacacttta ttttcattgc
                                                                      600
aaaaaaaaa
                                                                      610
     <210> 5657
     <211> 1107
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1095)...(644)
     <223> similar to gi3668416 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5657
ttttttttt ttgatggcta cttataattt atttataaaa cattttacca gtgagtgatg
                                                                       60
tctcaagtga gaggtggtaa cagatacaca aagcagttta tagcatgcaa tatttcaatg
                                                                      120
```

180

cctctgagag gtagaaacag cttgtgctct cagatggccc tcagtccttc cccttgtcat

<210> 5658

```
ctttctgtcc tagactgtgt cctaactgct cacaagggtt cagcggcatg caaacagtct
                                                                      240
ttaattggtt ttcttcaaag agggcattgt tgactgggaa agactgggct tgtatttaaa
                                                                      300
ctctggctct ttttgcaaat gacagacttt ctcaacagta tttccagagg aaaattttgg
                                                                      360
ttccggaaca gttaactgga atctgaccag attacagaca gcaccacccc atattactcc
                                                                      420
aatggctaag acacagcatc tttgattttc tgtatgtcat aacattctga agcttgagtt
                                                                      480
accgatggag ccatttttgc aactacacat cctccttata gttcttgctt tcctttcaag
                                                                      540
cagatcacag ggcccagggc aagatgattt ccttgaggag aagtagcctg agccttagaa
                                                                      600
atgcaatttg tataactgac cagcctggct ttccccctcc tttaggaatc tgattcttct
                                                                      660
tectetteet ectecteet tteegteaca tgaetetttg tgeteagete eagggttgtt
                                                                      720
tggttgattg atgcttcatt gtctacatgc accaacatat catgtgactg ttcaggtaca
                                                                      780
gtgtgagaag acagcatete ateceetett etagaaetga teattgattg gagggetaat
                                                                      840
tcttcaacct gtttgtttgt aaacctctaa attggcgcca ccacagctag tgagtagcgg
                                                                      900
agaactggcc gcagcaggtg gtcaccacag aggcccaggt tggggggaaa tggtcgctcg
                                                                      960
ggaggaatgg aggaggggca ggagagggcc gcggggtcac cttgaggcgg ttcagctgqt
                                                                     1020
cgtgcagggc tgccttcaac cgcagcagcg tctcctcctc cttgcgcagt tcctgaagcc
                                                                     1080
ggctcagcat gttgcctggt cacatag
                                                                     1107
```

```
<211> 3443
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (235)...(2472)
     <223> similar to gi30082 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5658
gcacgagtaa ggacagaaaa gtgaaatgca gtatggtgaa gaggataccc tgaatatgta
                                                                       60
tgaagacatg ctgttgtgag acggagttgt gaaacagagg ccacagaagc tgttgtgaag
                                                                      120
gcagagcagc atctgctgaa gagacagaaa ccagccccag aggtgtcaca ggaaggcacc
                                                                      180
agcaaggaca ttggtctttg atttgattca gcagtcctgt caagtataaa tgtgatggct
                                                                      240
gtgctgcctg gccctctgca gctgctggga gtgctgctta ccatttccct gagttccatc
                                                                      300
aggeteatte aggetggtge etaetatggg ateaageege tgeeaeetea aatteeteet
                                                                      360
cagatgccac cacaaattcc acaataccag cccctgggtc agcaagtacc tcacatgcct
                                                                      420
ttggccaaag atggccttgc catgggcaag gagatgcccc acttgcagta tggcaaagag
                                                                      480
tatccacacc taccccaata tatgaaggaa attcaaccgg cgccaagaat gggcaaggaa
                                                                      540
gccgttccca agaaaggcaa agaaatacca ttagccagtt tacgagggga acaaggtccc
                                                                      600
cgtggagagc ctggcccaag aggaccacct gggccccctg gtttaccagg tcatgggata
                                                                      660
cctggaatta aaggaaaacc agggccacag ggatatccag gagttggaaa gccaggtatg
                                                                      720
cctggaatgc cagggaagcc aggagccatg ggcatgcctg gggcaaaagg agaaattgga
                                                                      780
cagaaagggg aaattgggcc tatggggatc ccatgaccac aaggacctcc agggcctcat
                                                                      840
ggacttcctg gcattgggaa gccaggtggg ccagggttac cagggcaacc aggaccaaag
                                                                      900
ggtgatcgag gacccaaagg actaccagga cctcaaggcc ttcggggtcc taaaggagac
                                                                      960
aagggetteg ggatgeeagg tgegeeaggt gtaaagggge eteeagggat geaeggeeet
                                                                     1020
cccggccctg ttggactgcc aggagtgggc aaaccaggag tgacaggctt ccctgggccc
                                                                     1080
ccagggcccc ctggggaaag ccaggggctc caggagaacc tgggccacaa ggccctattg
                                                                     1140
gggtaccggg ggttcaagga cctcctggga tacccggaat tggaaagcca ggccaggatg
                                                                     1200
gggatcccag gccagccagg atttccaggt ggcaaagggg agcaaggact gccagggcta
                                                                     1260
```

```
ccaggacccc caggcettee agggattggg aaaccagget teecaggace caaaggtgae
                                                                     1320
cggggcatgg gaggtgttcc tggggctctt ggaccaagag gggagaaagg accaataggt
                                                                     1380
gccccaggaa tagggggtcc tccaggagag ccaggcctgc ctqqaatccc aggtcctatg
                                                                     1440
ggccctccag gtgctattgg ttttcctgga cccaaaggag aaggtgggat tgtagggcca
                                                                     1500
caggggccac caggtcccaa gggtgagcca gggcttcaag gcttcccagg aaagccaggt
                                                                     1560
tteettggtg aagtagggee teetggeatg aggggtttee eaggteeeat aggeeeeaag
                                                                     1620
ggggaacatg ggcaaaaagg tgtaccaqqa ctccctqqtq ttccaqqqct tctcqqacct
                                                                     1680
aagggagaac caggaatccc aggggatcag ggtttacagg gccccccagg tatcccaggg
                                                                    1740
attgggggcc ctagtggccc cattggacca cctgggattc caggccccaa aggggagcct
                                                                     1800
ggcctcccag ggccccctgg gttccctggt atagggaaac ccggagtggc aggacttcat
                                                                     1860
ggccccccag ggaagcctgg tgcccttggt cctcaaggcc agcctggcct tccaggaccc
                                                                     1920
ccaggccctc caggacctcc aggaccccca gctgtgatgc cccctacacc accaccccag
                                                                     1980
ggagagtate tgecagatat ggggetggga attgatggeg tgaaaceece ceatgeetae
                                                                     2040
ggggctaaga aaggcaagaa tggagggcca gcctatgaga tgcctgcatt taccgccgag
                                                                    2100
ctaaccgcac ctttcccacc ggtgggggcc ccagtgaagt ttaacaaact gctgtataac
                                                                    2160
ggcagacaga actacaaccc gcagacaggc atcttcacct gtgaggtccc tggtgtctac
                                                                     2220
tactttgcat accacgttca ctgcaagggg ggcaacgtgt gggttgctct attcaagaac
                                                                     2280
aacgagcccg tgatgtacac gtacgacgag tacaaaaagg qcttcctqqa ccaqqcatct
                                                                    2340
gggagtgcag tgctgctgct caggcccgga gaccgggtgt tcctccagat gccctcagaa
                                                                     2400
caggetgeag gactgtatge egggeagtat gteeacteet cetttteagg atatttattg
                                                                    2460
tatcccatgt aaaaacaaaa aaacaaaaaa caaagaaaag aaagagattt tatagaagaa
                                                                    2520
aatgacacac caaaaaatcc aaatgaaaaa cataattgct tcaaaacact tacacagttg
                                                                    2580
gaaagttata tgtaagtgaa aatttggacc attgtgtaca aataaaaact aagatgcatg
                                                                    2640
tttaatactc cacacagcag cctgtaattg cgaatgatgg gatagagtta tgtatcaagt
                                                                    2700
actgacactt ggttgtaccc actggaatca tattagctgt tttatgttat atgcttccac
                                                                    2760
agtaacctgc ttattcagat cagtcaaaat atatcagtat gaaagatcat agctaatgaa
                                                                    2820
aggcactcac tcatattgtt tactttaaaa tatttataaa tatgccttaa agaaatacaa
                                                                    2880
atgataacaa ttacataccg tatttacttg cttaatttcc tctgtatttg tgtagatact
                                                                    2940
ttgacatgga atatatggtg gggagacccg tagtgttacc gccccagtgg gaggggccc
                                                                     3000
tggggaccct ggtaatgctt tagtcaaagg gatatctctc ttgtatcaga ggctgtgtct
                                                                     3060
tttagtaaca ggagtcctcg tcagaattgc gtgtctgttg tctctaaaag aatgggtgaa
                                                                     3120
ccaatcggcc tttgtgaatt tattcagtgc cttctctgta ccaagcactg ggtaaggcac
                                                                    3180
ttttgtggag cattagacag taaccctcaa ggagctagag aaccggatgg gagacatgag
                                                                     3240
cggtaattaa ctcacttgtt ccccagagtt tctatttgtt ttgattttct ttttctgtga
                                                                    3300
cttattttcc tattttcttt cctccatgta attttcacta tggcccaact aatataaaca
                                                                    3360
cctggaaatt acaaggaaaa aaaattcttc ctctaataac tttccaaatt tgtggaatat
                                                                    3420
ttatttggaa tagcaggtat cag
                                                                     3443
```

```
<210> 5659
<211> 2091
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (365)...(1924)
<223> similar to gi4335949 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5659

```
eggacgegtg gggceaatgt tggageegte tgeaaagtgt eeeeggeaag aagaggetge
                                                                       60
ctaccacaag gactttagct tactttttaa agattgaaga aaaaaaaaga agacagaaaa
                                                                      120
agaagaactc aaagatacac aaagtaattt gaaccaaggc tcaaaagttt ttggagccgt
                                                                      180
gagggataca gcagtttggt caatattgtc ttaacatgct tcaaataaat cagcttctct
                                                                      240
ccaagataaa atggcaaacc caaaagagaa aactgcaatg tgtctggtaa atgagttagc
                                                                      300
ccgtttcaat agagtccaac cccagtataa acttctgaat gaaagagggc ctgctcattc
                                                                      360
aaagatgttc tcagtgcaac tgagtcttgg tgagcagaca tgggaatccg aaggcagcag
                                                                      420
tataaagaag gctcaacagg ctgtcggtaa taaaqctttg actgaatcta cgcttcccaa
                                                                      480
acctatttag aagccaccca aaagtaatgt taacaataac ccaggctgta taacaccaac
                                                                      540
tgtggaactg aatgggcttg ctatgaaaag gggcagagcc tgccatccac aggccattag
                                                                      600
atccaaagcc attcccaaat aatagagcta attacaactt tcaagtcatg tataatcaga
                                                                      660
ggtatcattg cccaatacct aagatctttt atgttcagct cactgtagga aataatgaat
                                                                      720
tttttgggga aggaaagact cgacaagctg ctagacacaa tgctgcaatg aaagccctcc
                                                                      780
aagcactgca gaatgaacct attccagaaa gatctcctca gaatggtgaa tcaggaaagg
                                                                      840
atatggatga tgacaaagat gcaaataagt ctgagatcag cttagtgttt gaaattgctc
                                                                      900
tgaagcgaaa tatgcctgtc agttttgagg ttattaaaga aagtggacca ccacatatga
                                                                      960
aaagctttgt tactcgagtg tcagtaggag agttctctgc agaaggagaa ggaaatagca
                                                                     1020
aaaaactctc caagaagcgc gctgcgacca ccgtcttaca ggagcttaaa aaacttccac
                                                                     1080
ctcttcctgt ggtggaaaag ccaaaactat ttttttaaaa aacgccctaa aacaatagta
                                                                     1140
aaggccggac cagaatatgg ccaagggatg aaccctatta gccgcctggc gcaaattcaa
                                                                     1200
caggccaaaa aggaaaagga gccggattat gttttgcttt cagaaagagg aatgcctcga
                                                                     1260
cgtcgagaat ttgtgatgca ggtgaaggta ggcaatgaag ttgctacagg aacaggacct
                                                                     1320
aataaaaaga tagccaaaaa aaatgctgca gaagcaatgc tgttacaact tggttataaa
                                                                     1380
gcatccacta atcttcagga tcaacttgag aagacagggg aaaacaaagg atggagtggt
                                                                     1440
ccaaagcctg ggtttcctga accaacaaat aatactccaa aaggaattct tcatttgtct
                                                                     1500
cctgatgttt atcaagagat ggaagccagc cgccacaaag taatctctgg cactactcta
                                                                     1560
ggctatttgt cacccaaaga tatgaaccaa ccttcaagct ctttcttcag tatatctccc
                                                                     1620
acatcgaata gttcagctac aattgccagg gaactcctta tgaatggaac atcttctaca
                                                                     1680
gctgaagcca taggtttaaa aggaagttct cctactcccc cttgttctcc agtacaacct
                                                                     1740
tcaaaacaac tggaatattt agcaaggatt caaggctttc aggttcacta ctgtgataga
                                                                     1800
caaagtggca aagagtgtgt gacctgtctg acattagccc ctgtgcagat gactttccat
                                                                     1860
gctattggaa gctccattga agccagccat gatcaggtat aatatgccac tgccattttg
                                                                     1920
ctgtgttatg gcccagctcg gaaatggaag gccatcaaaa tggaagctat gtgcgcacat
                                                                     1980
gcagctttgc tttccttaat acattatctg ctagcaccat ctgctagact tgaaaaatca
                                                                     2040
aaattgtttg cgttgggaaa ttgatatcat agtagattta aattattta a
                                                                     2091
```

```
<210> 5660
<211> 3880
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3774)...(1514)
<223> similar to gi605 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5660
ttagaaggat aggggaagag attaagtaat tgcagtttaa catgaaaaat gcacatgtga 60
tagaatggag cacaatggag gattcataaa acatgctcat cagaaaaatc tgttaagtcg 120
```

```
actttgtcca gattcagaaa gagtaagttt atcaacatct ggcatccctc atactttgtg
                                                                     180
aagatagatc ttctactgct taattatgag aaattatttt attcaaagaa aggagctctt
                                                                     240
aatcttttga taaaacaaaa taaaggagta gagagctgac tagatgtcaa gtgcttgcta
                                                                     300
gaaatgattt ttaaaatgct tctacacgta aaatgtactg acaaattttg gtaaaccatt
                                                                     360
taaaaataag aattagtttt aaaatcttgg agaaaatgcc tttttgccca catttaaaac
                                                                     420
tgaaaatcaa ttttactata gataggagtt ctgtggagtg tacaaaattc cttttagaga
                                                                     480
tcaaatggcc atcccagata gatatcatgt ttcacaggca ttacttttag tcaccctcaa
                                                                     540
gtttcagcca tgggaccaaa atttagtgtt ctgtgccatq tggtcacagq gtcattggtt
                                                                     600
tcacatcatg gcttaagaaa atactggcat tttgtttctt acgaagtaag tcctaccttg
                                                                     660
tgcatccaag caaaaagaaa aaggaagaaa acaggggagg gaaaggcgca agaagctttt
                                                                     720
tttgtttgtt tgttttgaag acaacagatt gaaggcaaaa aaacacagag ctttcacaag
                                                                     780
ctcaaagaaa aatatttgct ggctgatcgc tgatttgtat gcactataaa acaattccat
                                                                     840
aaataaaacc aatatatcat ttcttaatca tgaccctatc aaaaccaagt tatttcctaa
                                                                     900
ctattctttc aatgtcaaat gtaccctaga gttgacgttt catttttaag ggttacagct
                                                                     960
acctcatagg aactgaacta gatgtactct taccctttct ctgaagtata acagtacacc
                                                                    1020
actgcacaac agtatccaat ttgaagacta atggtaaaga aaattcttca ggaaaaactg
                                                                    1080
aaaatccatc aagctgaaaa tctaaaatta gttctacttt ctaatgaaaa atacataaaa
                                                                    1140
gtgcatcatc agaataagta attcttatgc cagtttgtat tgcaaatttt ccaaacaatg
                                                                    1200
catcaaacat aaacccaatc cagatgtcaa ttatgaatac aaatatagct tgaggttgtt
                                                                    1260
ttttttaaag gcagtaattt ttgaaatagt taatgcaact gttgctaaca caataataat
                                                                    1320
agtactcctg gcttcacata ctaacctgga cttccgatca agtgctgatt agcccagtaa
                                                                    1380
gggaggtcac caaaaaaccc aaatccattt cagtcatgtc tagtcttgta ccctccattc
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tcctttttta gcatttgaag acaacaggtt gagttggcag atattgttta tggaccctg
                                                                    1500
aggttgtttt taccgattca atctcagttt tattgaattc ttgataacag gaataggatt
                                                                    1560
tgcagggaga gcagggatat cagaaaggtc tgtactggat gttttctgag aggccaacag
                                                                    1620
agaagccgct gtctgaatag tttctgattg agttgtactt gtctctgtat caagttgttc
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ctttgcttct gttttatcat gtccactcaa agcaagacag ttagcatctt cacttgtttc
                                                                    1740
1800
gactcctact ataggagtag gtatttttgt tgctgcattt cctgaagttg ctgcatttcc
                                                                    1860
tgaagatcta ggtggtgggt ttaccagacg tgttgaagaa acaactctgg agaccgtagg
                                                                    1920
ctttggtggt ggagaaatgg ctggttgtgt ggcagtttga ggaatgcttt cactcgatgt
                                                                    1980
accccctgag ctttcactgg aatttacttg tggcacagaa acttcagtag cctgtatgtt
                                                                    2040
ggtcacagat gctgctgtta cagctggagc aggactgttt ctgccctgag agctgccaga
                                                                    2100
actgttcaat ggactggtct tcgtagcact agtaggtgaa ggcacagaca tgctgttatc
                                                                    2160
actgtccata gacaagtcga ggctgctgtc attgagagct gtcaatttga caccttctgt
                                                                    2220
tgaatgcttt ttcttttct gaagcacatg attaggtagt agttgatgga gttgctttct
                                                                    2280
ttttacatgc attgcagcaa ttttcatatc cacctcaaac atcttgctgt ttattgcttg
                                                                    2340
cctataaact gtatctgtga aagactgaat atcataggtg agatcaacac tgaggttttc
                                                                    2400
agagttttct gtttttttaa acactaaccc aatcacccac atcgtgcgaa attcttcctt
                                                                    2460
gtcgggattt tctttgggtg ctggaaatga ctggggattc acatgagcca gtgtaataaa
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ttcattcttc tccaagcttc caaccaggat tcggattttt gattccacca agcccaccca
                                                                    2580
ttccaggcgt tgattttctg ttggtgcact tgctagaagt acaatataat qcttgtactt
                                                                    2640
ttgaaagaag tttggagctt caaaaagttt ggaccactct gccttactca gcaaaatttc
                                                                    2700
atctgtgata gcaagacctt gtttaaactc ctcaaccatg accatccgtg ttgaaacgga
                                                                    2760
cacattgtac gtggagttct gttgtgggta tgctggtgta attataggca taagatggta
                                                                    2820
cctatcactg gggtttaccc ttgggtccca tacaggcaaa ttaagattgc attcttcagg
                                                                    2880
ctgtttcaat agcactggat ttggccattc ccatttagaa aataccaaga aaaatttatg
                                                                    2940
tacaagagtt gatgctattg catttggata aagctggcaa gttcttgcta ctagcatagc
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ccaggaaaca ccaccgagga aacctaatat attggaatag atgttgtggc gtttggccca
                                                                    3060
tagtttgata gctctcagag ttaacctgaa gttgtcaatg tttggtacta gatgtaaaat
                                                                    3120
ttcatcggtt accctgcaac cgttaagact tcttatacat cttatatcta aattttttag
                                                                    3180
cagactgtca tctcgtagat ccaaatcttc aggaattgtc tgcagtgcta atcttgcaaa
                                                                    3240
caaaatatca atctctatcc catcaaaaca gagtttaata actggtacga atgcctcttc
                                                                    3300
aacagctctt aaatctttta cttcttcctg taatttcaac ttatcataga atgaaggtga
                                                                    3360
aaaagtcact tcgatcaaca tgtcttggtg caaacacaca aacgccatca atatcagcac
                                                                    3420
cttttgtatg cacttcccta atctgtaaga tcccaaaatg taaaaatttt tcctccaaac
                                                                    3480
attttccaat tacagattgt ggaagattct tggcttttca ctgatttctt cgtatccact
                                                                    3540
```

<210> 5661

```
cttttaccag gtttatttag tttttcccaa aattaaaatt cctgcggctg gcagttccct 3600 cttccttctt caaaaaccc ccaaagggtt tcaatgtct caattagttt tctgtgtaag 3660 tacgcagtca gtctccttgg gggctgctaa gctgatagga gaagtaatgc catagtgctt 3720 ctgtggcggt tgtgtttgtt gtgatccctg tgttgtaact ggaaacggca tcgtctccgg 3780 cgccgcaccg cccagtcact tccccccgc aatcgccgc tgccgccctg gtatgatcca 3840 ctgaggcggg agggaggggg gggcctgcct cagcctcgtc 3880
```

```
<211> 2379
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2011)...(395)
<223> similar to gi4808552 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5661 ttttttttt ttaggaggaa atcttgtcat ttatgaaaac atgggtgaac ccggtgcaca 60 ttatgctgag tgaaataagc caggcacaga aagacaaaca ctgcatgatc tcacttacat 120 gtggaaccta taaaagctgc ccttatacaa gtaaagagtc aaatgctggt taccatgggc 180 tgggaggaga gggactgggc agatgtgtca aagaatacaa aatttcagtt aggaggcata 240 agttcaggga tcttgtacag catggtgact atagttaaca acaacgtatt gtattcttqa 300 aaaaaaggag tgatataggg gtaccagaga tgggcaggat gattgaagat cacagtccag 360 ccttgcagga ccccggggga cagggcgggc actcagaggt ggacctccag caggtagcgc 420 aggcgacact ggctctcctg gtagatgagg tactcgctct gggagaatgt ggagctgctg 480 aactotgggc agggcacagg ctggccctgg ggcaccacca cttgctggcc atccagctcc 540 aactcagtgt cctgggtcgg atcaggctcg gtgtggcctc gggcaatgac actgtcgaag 600 ccaggaggtg ggctcttcaa gctggggttg tccgtgttga tatggtgctc tctgcccagg 660 gccacctcac ccaggaacat gtagccgaca tggtgggccc cacacttcat qccaataaca 720 tatccagctg acttgctgtt ctctgaggca aagtagatgc ccttgccaac acgcccacca 780 gaatgtggca tgatgcggag cccactagtg aggatggcgg ccaccacggc catgttggtg 840 ccatgccaca gcagcttccg attacccagt ttggagtggg cctggaatct gtcttcctcc 900 ccttcttggt ttactttcca gatgtgttga agtgtagggc acctgtggtt gctgccagtc 960 tgttctaagt aggtctgtat caccttgtac tcaggtgctc cagagtctag cagctgcagc 1020 tggcacttga gaagctggta gtctcggtcc agggggtgtg gcacctcctc caccgtcttc 1080 tectgeteag agactgeetg cagggeetgg gecagetega tgteegeeag caecageage 1140 atgtccttct tggcctgcag aagctcaggg gaattgatgg gcgggggctg gctgtggccg 1200 aagttgtgcg ggatgacggt gtaaaagtgt gaggacagct cctccaggct ttqqccacca 1260 tccgtggggc ctttcagggc ctcctccagc gcctccaagg cctcgaaacc ccgtgcaatc 1320 tgttgcttgc tcagctttcc caggggcatc ttcttcacat ccaggtccat gagggccatg 1380 gtgttcttga acatctcctt gctgaagatg ttagtgatga gcttctgcgt ggctgggtcc 1440 agggagcagg gctgcacccg cttagtcaca gtcctcactg ggcctctgtc caccttcacc 1500 acagcttcct gggcctcatc ctctgcctgt acttcgataa gtgtgtactt gcccgggtga 1560 gacacaaagt ggtcccgctc tgcccagttg ttcttggtct tttcccgaaa tttcttctca 1620 aagtccttct ttgcatcttc tagccttgtg aagtggttga tctttgactg gccgacctct 1680 cccacacggc cccagcggtt ccagcaggtg aagaagcggt tgctgtcttg gagcagctgg 1740 atgatgtaga acttgttgtt gttgttctcg aatgttggtc ttggttcagg gtgcaagttg 1800 tagtcctcat acacctgggt cccgggggtt tgcttgcttg agtggacatg ttggaatcca 1860

```
cgcggattat gcgctttctt ctgcggggta atggcctttg agggcctcag cgggtggagc
                                                                     1920
ggaaggggtc cttccttccc ttcctgcctg ccggcccttc ttcttctcag ggccctcagt
                                                                     1980
ctgtacccag ggcttcggct ttggagccat ggccaagaaa agcagggaca tgggagaggt
                                                                     2040
cctggctgcc acccggcctg gttgtgtgcg cctcccaggg cagtcccagg tctagcaact
                                                                     2100
ctccatgage ctcaggegtg aattagggag agaatteeca acaategeea gaggeegggg
                                                                     2160
atgagettgt gtgggggatt agacategge tatttggeea eeagtggggt gaageagagg
                                                                     2220
ctggggcagg ccgagtcagg cgaccagtcc cacggacggg tggacactcg atctggcata
                                                                     2280
tocaaggoog gggcagtogo gtoogtagog otgotoatgt ggcoggggoo tgcagcacgo
                                                                     2340
atcagccggt cgcgcggtga ccttgggccc ggaacgaaa
                                                                     2379
```

```
<210> 5662
<211> 2113
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (508)...(276)
<223> similar to gill77607 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5662 tttttttttt ttgagacaga gtcttattct gtcacccagg ctgqagtgca atggcgtgat 60 cttggcttac tgcaacctcc gcctcccagg ttcaagcaat tctcgttgtc tcagcctccc 120 aggtcgctgg gactacaggc atgagccacc acacccagct aattttttgt atttttagta 180 gagacggggt ttcgccgtgt tgaccaggct ggtctcgaac ttctgacctc aggtgatcca 240 cccacctcgg cctcccaaag tgctgggatt acaggggtga gccactgcat qcqqctqaaq 300 gtaaggattc taaactcgga gactagaaat gtcctaaagg tgtctgcaac attqqatqaq 360 gagtacaagt gcatttttct gggatgattc ctcccttttt atcacattct caqaagtatc 420 tttgattcag aagagttagg aatgcctccc tatttcagtt gggttttctg ccctttctcc 480 acagaggtcc agactcattt tgcttaattt tttttctagc tggggcctgg gaggtagagg 540 cttcagggcc tgggtggtag agctgcctga caagtgttca gcagggctgc tgggtcaggg 600 ccctgtgggc cttctgaccc aacctgaaga tgggtctqct aaqtctaaca aqqtcaaqqq 660 aagatcagag ggacccagat tottttttat cocccacttg aaacggagto ttgctctgto 720 gcccaggctg gagcgcagtg gtgcaatctt ggctcactgc aacctccgcc tccctgaccc 780 tcacactgtc cagtgccctt gtggttactc agcatcatat cttgagactg gcctggcagg 840 agccagtgac tgtggaatga ccacagaaga ttcagggcag ctgccagacc aggggctatc 900 tctgccctgc gctgcttctg ctcaagagag gttgtcacta gcctctgatc ttcccttgaa 960 gaacccgact ggggctcttc agagggtggg gcccaggaag ttgtagttaa ccccttcccc 1020 aggcagtcct tacacggcca tctaggtatg cctgggaacc ttgcaccagg tcggtggttc 1080 teactggetg eccattggaa ttatetgggg ageettetgg aaacgeagtg ettacattee 1140 atctccctag accaacagaa actgccctct ggaggtgaat cccaggctta gagattctga 1200 tgattctgcg gtccagtgag tgctgagatc tgtcctgagc tctgtgggga qqqqcctqqa 1260 ctgatcactg cttggaaatg attttgccct acagtaggcc ttcaagttga tcaaatgcat 1320 gaatgagcaa gcttttcttg gagtttgtga tgaagcccag gaaccgggtg cttgcagtcg 1380 teccataagg eteccaggga caagetagag aatetggetg teeetetgte tecatggtge 1440 cagccctctt aggctcagtt caaagggaga ggaggctagt taaataagaa actgagagaa 1500 acatggagca ttattgattt attagaaaaa ctagtaaatg ggtttcctct ggttggtgga 1560 agcacggttg agcaggtgga ggacaggacc cagctggccc cagggccagc cccagattgc 1620 atggtctgtg cccaacaggg ttgcattcct ctgcagccgc cgcctcctca tttcctccct 1680

```
gagettgttt gtecaageea ecaageeatg tggteeeget ggetteatee teetetggat
                                                                     1740
tectgeece eteccatgaa gggaggaaga ggatteaggg teageetagg ggaeeetgge
                                                                     1800
teeeteegat aggeaggaag gaggagggat geggaggaga ggetgageet teeaegggee
                                                                     1860
tcctgttagg ggtgttggtg gaggccaggt tggtgaggga agcctaagga ccctccacac
                                                                     1920
ctcccacage cagagtcagt tgaggctggg acaaagggga aggagagagg gaaggaggac
                                                                     1980
cgcctgacct tgcccagaag gagcttcctc taaactgccc tgggaaggaa gcctggtatg
                                                                     2040
ctggtgtgga ctggagctgt gtcaacctcg tttgggaata ctgtcaaaag actgtagagt
                                                                     2100
agaataagga gag
                                                                     2113
```

```
<210> 5663
<211> 4450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (65)...(1861)
<223> similar to gi3882251 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5663 aaatgatgtc agagattttt ttcatgggct ccgtgttgat gcagtgcatt tgttgaaaga 60 tcatgtaggt cgaaataatg ggaatggatt ggttaagttt ttctcccctc aagatacatt 120 tgaagctttg aaacgaaaca gaatgctgat gattcaacgc tatgtggaag ttagccctgc 180 cacagaaaga cagtgggtag ctgctggagg ccatatcact tttaagcaaa atatgggacc 240 ttctggacaa actcatcccc ctcctcagac acttcccagg tcaaaatcgc ccagtgggca 300 gaaaagatca aggtcaagat caccacatga ggctggtttt tgtgtttact tgaaagqqct 360 accatttgaa gcagaaaaca aacatgtcat tgatttttt aaaaagctgg atattgtgga 420 agatagtatt tatatagctt atggacccaa tgggaaagca actggcgaag gctttgtaga 480 gttcagaaat gaggctgact ataaggctgc tctgtgtcgt cataaacagt acatgggcaa 540 tcgctttatt caagttcatc caattactaa gaaaggtatg ctagaaaaga tagatatgat 600 tcgaaaaaga ctgcagaact tcagctatga ccagagggaa atgatactaa atccagaggg 660 ggatgtcaac tctgccaaag tctgtgccca cataacaaat attccattca gcattacaaa 720 gatggatgtt cttcagttcc tagaaggaat cccagtggat gaaaatgctg tacatgttct 780 tgttgataac aatgggcaag gtctaggaca ggcattggtt caqtttaaaa atgaagatga 840 tgcacgtaag tctgaacgct tacaccgtaa aaaacttaat gggagagaag cttttgttca 900 tgtagttacc ctagaagata tgagagagat tgagaaaaat ccccctqccc aaqqaaaaaa 960 gggattaaag atgcctgtgc caggtaatcc tgcagttcca ggaatgccca atgcgggact 1020 gcccggtgtg ggactgccca gtgcaggact tcccggtgca ggcctgccca gcacaggact 1080 gcctggttca gcaataacca gtgcaggact gcctggtgcg ggaatgccca gtgcaggaat 1140 acctagtgca ggaggtgaag agcatgcctt cctgactgta ggatcaaagg aagccaataa 1200 tgggcctcca tttaactttc ctggtaattt tggtggatca aatgcctttg ggccaccaat 1260 ccctccttcc agggtttagg gaggcggggc ttttcgtgat ggttaggcct ggtatgcctt 1320 cagttggaaa cagtggtttg cctggtctag gactggatgt tccgggtttt ggaggtggac 1380 caaacaattt aagtgggcca tcgggatttg gagggggccc tcagaatttt ggaaatggcc 1440 ctggtagctt aggcggtccc ccggggtttg gaagtggccc tcctggtctt ggaagtgccc 1500 ctgggcattt gsggtgggcc accagctttt gggcctggcc ccggccccgq ccccqqccct 1560 gggcccaatc ccatattggt ggttccccct gggctttgca tctagtttct ggaaaaccag 1620 gaccgacagt aattaaagtg caaaacatgc cctttactgt gtctattgat gagattttag 1680

1740

atttetttta tggetateaa gtaateeeag geteagtgtg tttaaaatae aatgaaaaag

```
qtatgcccac aggtgaagcc atggtggcct ttgagtctcg ggatgaagcc acagctgctg
                                                                     1800
tcattgactt aaatgacagg cctataggtt caagaaaagt aaaacttgta ttagggtagc
                                                                     1860
cattcacatc attttttata gggtagatct tcatattqct gtgattaatq catccagatt
                                                                     1920
gttttcctag tatttccagg ttagaacctg tggattgttc caatggccat atagcttggt
                                                                     1980
ttccataaca tcgagcagca ttggttgact gtttacagaa agactcactc cacccaggat
                                                                     2040
aaacattgct gtatgttacc agtaaagcta tctggagaga acacataaat gattttqqqc
                                                                     2100
ataccattag aagaaaccat ttgtaaactt caaattacca caataaggct tatcaaggag
                                                                     2160
tctaggattg gttttgtttt ataccatatg ggatgaagaa aatagaaatg tcagtagaac
                                                                     2220
tcattgaggg tgctcttgcc agctgctgaa aatagaagtt ggctactctc agaatttggt
                                                                     2280
ttaaaagctg gacagatttg ccttgttaat agggtaaagc tttgtcctaa agtccctcat
                                                                     2340
tttcctttta aaattgaata aaatttctgt atacagattc attgtatgta cctttattgc
                                                                     2400
cttccttaag ggtccttgct gtatagacag tcctgccttc agaaggttgc tgctttgttt
                                                                     2460
gtctaattga ctcatttgta aatgagcaga actgttttgt gggttttttt ccctaaatat
                                                                     2520
aaaagtccca cacttcgttt gtgctataac ctcaaacttt gatttctaat gtcacactta
                                                                     2580
aaactgtgtg gaataagact tttgccataa aaataaacta tggagtcctt tatctaccag
                                                                     2640
agcctttttg gtttgaccgc cacgatttag gttagtcagt ttaaaaattg ttcatgttgt
                                                                     2700
ttggatggta tcgaaaacca gaaaccactt ttaataatgt gtttaagata cttgatttga
                                                                     2760
agtoctttto atatggacta attgtagtat caatttooto otgtocogat tatgtgaaat
                                                                     2820
tttggccttt aaacaaagag gggcccattc ataagaaagt gttatatcta ggtttttaaa
                                                                     2880
actgaagttg aaattatett tgttageagt agtagtatag aataaaagat eegtatgetg
                                                                     2940
qttcgtagat tgatacqtqt tagtcctgtt atttggaggc tttttggcat agttgttcga
                                                                     3000
tcaggagcct gtttactaaa agtcttcata cagagtacaa gtgcagccgc cagaggagaa
                                                                     3060
aattgagatt cttgaccctt tcatactctt ttctttggta ttcaggacac taaggcagga
                                                                     3120
ggaccacatg agttctggtt ggtaagtgtc cttgtcatga aaacacttgc cttacaaggc
                                                                     3180
tctaattatg atttccctag tcagtgctct gaagatgtgt cacattatat tataaacaat
                                                                     3240
acggaagggg agataggtga gatgatatga aaaacaaatt ttctcactqt cataaaaggc
                                                                     3300
tctaattatg gttactttcc ttgtgatgaa aaacttggcc ttacagggct ctagttatgg
                                                                     3360
ttactttccc tagtcaatgc tctgaaaatg tgtcacatta taaacaatac agaaggagag
                                                                     3420
atagatgaga gatcatgaaa accaaatttt atcttttaca tggccccttt gtcttcgttt
                                                                     3480
gaaacatccc caacatttcc tacaaatcag cgtagttaca aaggggtcag tcttttaaaa
                                                                     3540
taaqtatttc ctattaaact atatatat acagtgcctt tttggtgttg tgagtcagtg
                                                                     3600
gaacactgaa atacagcggt tgtgtaattt aagagtggca acagtttcat ttgataagat
                                                                     3660
ttgaaaaggc tttttatcac tacaatctta gaggattgac agtacaggat ttttgtttaa
                                                                     3720
gagaaggatt gtttagactc aagaggtgac tatgttgtgg gtcttttgat aattcatgaa
                                                                     3780
tacagatttg ctttgaccga tcactagata ctgcctcctc aatttcaaaa gcaatataac
                                                                     3840
gtttgtatat gctgtttaat ttaagttaat gttaagtaat catttctcat tccaaaqaca
                                                                     3900
atgcaaaaaa cttcagcact gcttgagagt tgtatttcag ccacagatat tttctccatt
                                                                     3960
ggaaagctat tttcatttta gaaaaatggg ttgtttgaag atgaaagtct tttatctttt
                                                                     4020
ttcacaattt attttggtta tatgttcgta cattcttatt aaatatttca tacactttat
                                                                     4080
tgcaactact ttgttatttc tacatcttag ataaatgctg aaaaggaaaa cgatttcatt
                                                                     4140
gttcatctaa ttaaataaat taaaagagcg gtttgtgtag aaattggaga gaactatgtt
                                                                     4200
ttatatgaat cacaacagtg ctcgttgtgg actgtaatta aatgctttgc cctctggaac
                                                                     4260
ttgatttttg tgtatctgag atttattaac agtgctaact gctaaggata ctgtttatct
                                                                     4320
tgttctgggc attggagttt cagtttttaa aaaattcttg aaaatgtatt ctgtgaaact
                                                                     4380
actcatacct ctcttcctgc gaattttctc ctaagaacta ggtttggggt agaaatgaat
                                                                     4440
tgacattatt
                                                                     4450
```

```
<210> 5664
<211> 659
<212> DNA
<213> Homo sapiens
```

<220>

<221> misc feature

```
<222> (356)...(600)
     <223> similar to gil389766 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5664
cataggttgg aaactgaaac ctgcacattt gtggcaaatg tcactgcatt tacagggaga
                                                                       60
gaaagaaaac cacatgactc ttctttgtat gttaaagact ttttattttc aggccctttc
                                                                      120
agaggaatca attcctttaa acctttgtaa aatgccacag gagccaaggt taagcgatgc
                                                                      180
ttttaactta ggaactgacc ctctccaggc agagtctcca aagtagatta cctcgaaatt
                                                                      240
tcaaagaggc agttctacaa gaggagcctt tgaagaagcc aatcctgttt tccattgttt
                                                                      300
tgctttcaca cacgggttga acttgaactc ttacctttct ccatttataa caaccaaaat
                                                                      360
ccaccttaaa aaatcaaagg ctgggagcgg tggctcatgc ctgtaatccc qqcatttaqq
                                                                      420
gaggccaagg tgggttgatc acctgaggtc aggagttcga gaccaqcctg accaatatqq
                                                                      480
tgaaaccccc atctctacta aaaatacaaa aattagcagc ggcgggtgcc tgtaatccca
                                                                      540
gctactcagg aggctgaggc gggagaatcg cttgaacccq qqaqqcqqaq qatqcaqtqa
                                                                      600
gattgcgccc ctgcactcca gcctgggtga cacagcgaga ctttttcaga aaaaaaaa
                                                                      659
    <210> 5665
    <211> 1300
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(1301)
    <223> n = a,t,c or q
    <220>
    <221> misc feature
    <222> (217)...(811)
    <223> similar to gi1055044 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5665
cttgaattcc tgacctcaag tgatccaccc gccttggcct cccaaagtgt tgggattaca
                                                                       60
ggagtgagcc acctcgccca gccaacttga cataactttt aaagatggat tqccaaqctg
                                                                      120
aggtgaactg cgggcttcat ctggttattc aaacatcatc gcttcctgaa aaaaacaaag
                                                                      180
ttgaattcaa gctaaataaa gacacatcgt cattccccgg tagactttta caacatgacc
                                                                      240
ttgaaagaaa ctactcaagt aggcaaggtg atcatattaa tttggtgagc tcatcattgt
                                                                      300
catcatttcc tattcttcaa cgttcttctg aagagaaaat tctttactca gacaggttga
                                                                      360
gcctagaaag acaaaagctg accgtatgtc ctatcatcaa tggggaagac caccttcgtt
                                                                      420
tgttgaactt tcaacacaat tttataactc ggatacaaaa tatttctaat ctacagaagt
                                                                      480
taatatcgtt ggatttatat gataaccaga ttgaagaaat tagtgggctt tcgactctga
                                                                      540
gatqtcttcg tgtccttctg ttggggaaaa acagaatcaa gaaaatctca aatctggaga
                                                                      600
atctaaaaag cttagatgtc ttggatcttc atggaaatca gattaccaaa attgaaaata
                                                                      660
ttaatcattt gtgtgagttg agagttttaa atcttgccag gaacttttta agtcatgttg
                                                                      720
```

```
780
tcgtgagaga tgtggataat ttgccctgcc tcccaacatc tctttctcag ctttaacaat
                                                               840
atatctagtt tttgacagtg ttttcctgcc cttgctggac tcttctttcc ctctcgggac
                                                               900
atcaccettt gagggecaat eccatagget teaaggagte agggtaceaa acacactgte
                                                               960
cttcagaata tgatgcagct gcgccactaa gatatggaag gagaattcac gggaagaaga
                                                              1020
aaaggcgtat ggcatctgtt ttagcccaaa aaaggaggga agaggaagga gccgggaaag
                                                              1080
tectaaacca ttettttget taaggagaag aaaagggtta accatttaac cacgtagett
                                                              1140
cgacagtggg acttgcaaca acgagtagcc aatattgcta caaatgaaga tagaaaagat
                                                              1200
ttctggactc tcctcaggac cctgttcaga ttgatgggaa ggcaccctct ttggctttcc
                                                              1260
cagaggccca caggggcntt taggattcag ggnttcaagg
                                                              1300
```

```
<210> 5666

<211> 892

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (845)...(300)

<223> similar to gi4929703 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5666
ttttttttt ttaaaatata tttgctttat tatgtacaca ctatatttac atcacccacc
                                                                       60
ctgaaaacag caggttctgg cttttccgtg aacccccaga tgaatataaa ttggaqcctc
                                                                      120
tgagaacagt tccttcccca gagcggggag tgtgcacgtg tgtgtgtaac cttctgattc
                                                                      180
catgggacct ggccagctcc tctggagcca cacagcacct ccttgcctta caccctggct
                                                                      240
ccagcttcac tggtccgggg gacgcctcag cctggggcag ctgtgatgta aaccagtcac
                                                                      300
tccacctcca tcttcctctt ctgcaaagaa tcgaggaagt cttgccactc tgctgggtaa
                                                                      360
aagcgtttat agacgttgat cttactccga atctgttttg gggtatcttg atagtaattc
                                                                      420
ttctcatcac gggccatggc cttatagtcc tccccgtggt tctctaccat gtagcgtaca
                                                                      480
tagtcaatga ggtcccaaga cagagtattt cctttctttt ctggaaggct ggcttctgcc
                                                                      540
tccaggtcat tcagcacata gggcttccgg tacaagttct tttaggcctc ttcctctatg
                                                                      600
tecacettee atggeettea cetttetett aegggaggge aeeggeeetg ttggggteea
                                                                      660
cagccaaccc catctcggcc aaggttctgc cgtaccgatt tacgcgtggt cccacqqcat
                                                                      720
gtcggatgtg ggagcattcg agtcctgcgc gctgccttcc qtcgaqcatt ccqqttcaqa
                                                                      780
cgctttcggt tgacactgta accaaacttc atgctaccgg gtttatgccc ttggccttgg
                                                                      840
gcatcgcgct gaccaccgca ccagcagctc aaacacgctg cctctgtctc tc
                                                                     892
```

```
<210> 5667
<211> 1366
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<210> 5668

<222> (1109)...(459) <223> similar to gi1825695 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5667
cgggttgtgg tcaatatgtt ttttagaaat aaagacggaa aaacatcaca gtgcataata
                                                                       60
tataaggtca atgtcttgtg atacttgatg tatgtatgta tcacacacac acatacacac
                                                                      120
ctacacaca atacacaaac atacacaatg aattccacag atattggatt gtgatgtaat
                                                                      180
ctttatttct tactctgagc tccagttaga aaagtttgac aatcattgtt ataqaqctat
                                                                      240
gttcagaaag tggagacttt ctgactcact gtgagctctg ctgtatctat gcgctccctg
                                                                      300
gagagggagc aacttgctaa ggtacagtcc tggccattgg catggatatt tattgttcca
                                                                      360
catgttggga aaaccatgtg caataaaaat caaacatatg aaacaatggc tgtcattgta
                                                                      420
ccacagtata cattgtatct tggtgaaggt tcttaaatta ctccttggag tttcctaatt
                                                                      480
cacttcagga aggatttgtt gtgttccgtc tttatgctgt cacttgcaaa cacttttgct
                                                                      540
ttgctagttc ttgtattaga tcttcatata cttgcaaaaa gaggtcctct tcagattttg
                                                                      600
ttccatccag gtacacaact tcccatgtga tgtcctgcat ttcttqtctq tactttaqat
                                                                      660
acatgggcca cacatggcca tcaaagtatc ccggagagtc tggaggctga tagacccttg
                                                                      720
tactcctcct ccttttacat tcttcatatg gaatagtcag gaaatagctt ctattccata
                                                                      780
tagtgtcaag gggcttataa ttaaaaagaa gaaaaccttc gatgattaaa atgggaattt
                                                                      840
ceteageact tteetggtet gttgatacea cagagtgtet tgegetttee atecageagg
                                                                      900
aaatggctga catcattttt tccatgttaa gtgcttcaag cacatcgtac tgcaaaaatc
                                                                      960
catttttatc tgtctctatc tcagactctg gcttgaagaa atcatcctga gatatgacac
                                                                    1020
tgcaatttgg gaggtgtttc tgcaaattct tagccagtgt tgttttgcca ctgtttgtca
                                                                    1080
caccactgat tccaatgata aatgttttca taattagctt tgaaaatcac agcttcctaa
                                                                    1140
tatttcctgg cgccagttcg agtcctccca aacacagcgg cagaggcgac agccaagcgc
                                                                    1200
gcgcctgtac ccagtgcgcc gctacccgca gctcgctccc cgagaggccc acagcccctt
                                                                    1260
tececaeget ceteetgggt tagagggatg ceaggtaggg geggteacea gaggeeeett
                                                                    1320
ttctctactc tcggcgccgg gttccagccc ccgttggggc acgaaa
                                                                    1366
```

```
<211> 908
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (548)...(293)

<223> similar to gi2318003 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5668
gcgggccccc gatggctggc ctgactgtcc caggggcaca ggctccagca ggctgcctgt 60
ctgtggtcca ggcttcagga acccccggtc ttgggtgtc gggggctggg aagtggctgg
gggtgcacag tcccacacct gtcattcact gaacaggcac gtattgacag cttgtggcgt 180
gtcaggccct gtgcccaact ctgggagtca aggataacct gacagactca ggccacttta 240
ggaaaacgaa atccaccca accacactta gcgagtcacc ctggccgggc ctgggctgcc 300
ctccagtcgg tcagccggac tggatttcca cgcggccgag ccctacgcct cccagaccct 360
```

```
gageteeagt etgeaeagge eaggtgtetg gageegggee tggtgaeagg eateceeeag
                                                                      420
gtgggaggag gggctgtcct ggctctgacc tggatatcag atccagagct gaggggagg
                                                                      480
tgcagggtca ggaggggagg ggttctgttc tgagtttccc ctgqccaaqg ctqcaqacaa
                                                                      540
qqqacqcaga caatcqgcac attqtqaqca qqqqctqcaq gatqqaacca gcaaqctqct
                                                                      600
gtgctgagcg ccccaaacct gggcctacag gggtgaagac caaqccctcc tqcqqqqct
                                                                      660
ggagagccgt gggcctgctc ctgctgctgc tgctgctggt gctggccgct gtggggattg
                                                                      720
tggctggagg gcttcttggc tctgctcagg gccctcccaa gccaaggctg cagacgctgc
                                                                      780
gaatgaccct cccgagcccc cacatgcccc ggcccaacca aaccatcctg gtggacgtgg
                                                                      840
cccggaacgc ggcgaccatc acagtgaccc cacctcagag caaccacagc tgggcggtgc
                                                                      900
tqttcgaa
                                                                      908
```

```
<210> 5669
<211> 1642
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (403)...(865)
<223> similar to gi804811 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5669 ggaacacaga gaaaggttca cccgggagag atggcctagc cacttcctta gtgactgttt 60 ggtatatgta ggtccccctg ccattactct ttcagccttc tgcaatctag ttctacttag 120 teacacactt etetaagace acteatacgt aaacactacg tagaggeece tttttgeete 180 attttacatt gtttagttat cattttgaaa cttttcttca catatgtaac agtgccggag 240 tttttctqct tctctqtqtt tgttcaqtaa ctcttcttta ggatacacct aaagatgaga 300 agetteatac ceagtactee tetteattea eteatatgtt tttgggatea gteettetg 360 ctggctgtgc attggtctaa tggaacagaa tagagtccag aaataaccca acatgtatgt 420 ggacaactgg tttttgacag aggtgcaaag gtcttgaaaa aatgatgctg gaataattgg 480 gcatcagatg caaaattaaa aacaaattga tccatatctt aacactggca aagattaaag 540 tccaaatgga ttatagttcc ccaaaactgt ataattttta aaagacaaca aggaaaacgg 600 gttcagcctt gggttaggaa aagatttctt aaatccaaca ccaaaagcac aatccatgaa 660 ggaaaaatcg ataaattgta ctttatcaaa attgagaact tctctttgaa aggtaccata 720 aggagaacaa aaagacaagc tgtagagtgg cagaaaaata tttqcaaaac atttctqata 780 aatgagttgc atctaggtta cataaagaag tctcaaaact qaacaaagta aaacccattg 840 ttgacttaat gcgctgtttc ctcctgagct tgctgcctct gcccctqctc tctctccttt 900 tccatttgtt ttcaacattg aatccagaat gttcttcttg agatccaagt cagatcacac 960 caaccetcag aactetecaa tagacgacca tggcactcaa aagtecacaa tageetteaa 1020 tgctgggcaa aacatgaagc accccttttc tcccttctct qaccccatca cctctgtgtt 1080 caccetquee etgeogteet ecetgeetee aaaacaggte aggeettegt geetttgeae 1140 ttactatttg caatacccaa atgttcttca ggctctttag cctcttcatt tctttcctqa 1200 agtgtcattc tcactgaggg cttatctaaa agctggcagc tactgggggc attcctgtct 1260 catctccctg ctgtattttg taactcccgg gctctctttt gtacttttaa acatactata 1320 tggtttacct ttgttgttta tatttgcatg ttgtttccca cttgaatgta agctccaaag 1380 attttatttt tttaaactga attattactg tattcccaga acaattccct ggcaaatatt 1440 tggtactcaa tagtaatgct aagttagtaa ataaatgatg aatttagaat caaaataacg 1500 tgtctatggc caaaataaaa cctgaaatcc ctgtcctatt ttcccagagg taactgctgt 1560 taatagttta gttgtgtgct tccagacata ccttcacaga atcatttatc acaataaagg 1620

```
<210> 5670
     <211> 1249
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (497)...(333)
     <223> similar to gi347455 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5670
cccacgcgtc cggtgtttga ccaggtcaga actcttgttc tatqcqaatq tqctcacqca
                                                                       60
gacagaageg gaggggetee gtegetetge ceteaegeeg etgaacegeg agggteteee
                                                                      120
gctcctcagg cttgcggctc ggccgcgaag tgtgtcaggt gtgcatcctg ggtgctcctt
                                                                      180
tgtgctctgt cctacggcga cacaggcggc gtggggttag acaggtaccg gtcagactac
                                                                      240
ggtgacacag gcggcgtgcg gttagacagg taccggtcag attacggtgg cacaggcggc
                                                                      300
gtggggttag acaggtaccg gtcagattac ggtgacacag gcggcgtggg gttagacagg
                                                                      360
taccggtcag attacggtgg cacaggctgc gtggggttag acaggtaccg gtcagattac
                                                                      420
ggtggcacag gcggcgtggg gttagacagg tactggtcag atgcacgggc tccctaaacc
                                                                      480
cctgctgtgg cttcggcagt aaagacagga cgcacccatg tcacaagagg agcacaggca
                                                                      540
ggggtgttgg tgttggggca gccctcaggg tctccagacc ccagccccac tcacacagca
                                                                      600
gcctaggaag gaagggcaga gtcccaggtg tcagctggtg ggtctcccag gagctgccc
                                                                      660
tccctggaag tcacaggaca ggaatgacag atcagggaac tgcaggaagc tgccacctct
                                                                      720
ggggtcagaa tatgcccagc ctgcgggggc tctctatcgg ggtcttcgaq agccaqacaq
                                                                      780
cctgccttgt gctgcatacc tggctttgct ctgtgcagaa cccagcacac gtgattttgt
                                                                      840
gtgacatgcc agcagcctgg ctcccaggac aggaggcctg ccctggggga gqqqctqcaq
                                                                      900
gaggaggggg ggcaggcacc catgagtctg tccaqccttq tcacaqatqc atcqcccaqc
                                                                      960
ctgcggtcct gatttcagct cacctcagag taaatcagaa taaactgcac ccagactttc
                                                                     1020
acgaatgcat gttgacgctt tcagttcacc cctttctttg ctaactttct tcctattttc
                                                                     1080
ttctaatgcg agagcttatt aattccatat ttatcatttt gaataacttt tctccttttt
                                                                     1140
aggttacaaa agtactttca ctcttagtaa aatgtattta ctattttagt aacaaaata
                                                                     1200
tacttgccta atcatgttta aaatatagtg atgtgaaaaa ttctcgtgc
                                                                     1249
```

```
<210> 5671
<211> 2042
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (513)...(1360)
<223> similar to gi4587223 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5671
ctctgttggg aacttttctc atggagaaag ctaccatcgc tttgaagagg tattcttcat
                                                                     60
tggtatccca ggcatatgct ttatctccca gagctgttct gataataagt ctcactttaa
                                                                    120
aagcatttto tgcacctcga acgtgggggc gcggtcctta cgtgtgggcg cggtccttac
                                                                    180
gtgtgggcgt gccttgttgc tctgaggggc gtaacaaaga tggtggagca ggcggagggc
                                                                    240
agaggcgtcg gcaggttagc gtgcaggcgc gtggcagcga caggagatgt gtagccagag
                                                                    300
egeagageag gtgtggaete eggegetggg gaagegtgge eagggegaga ttteageetg
                                                                    360
ggtcggggac agaatgggga ctgatagggg cgtaacctgg aatgacgaaa tgacgtttgc
                                                                    420
tgcgtaggga cgtggctaaa cgtgaggggg cgtggccaag atggccqcqt gtqqqatcct
                                                                    480
cgggtaccgg gagcgaacga ggaggttctg gctcagtgca tccactctgg gagagcgtgg
                                                                    540
acctggttcc tgggggcgat cgacagtcac ccatcaacat tcggtggagg gacagtgttt
                                                                    600
atgatecegg ettaaaacea etgaeeatet ettatgaeee ageeaeetge etecaegtet
                                                                    660
ggaataatgg gtactctttc ctcgtggaat ttgaagattc tacagataaa tcagctgcac
                                                                    720
ttagtgcatt ggaacgcagt caaatttgaa aactttgagg atgcagcact ggaagaaaat
                                                                    780
ggtttggctg tgataggagt atttttaaag gaaaattctc agtctccctt gaagaagtga
                                                                    840
agceteette tttatgeact ggeeactgte taatacetee cageaatact cagaggagae
                                                                    900
tacctgctgg aacctcacta gaattgagag atcaaatggt tttggctgtt ttcccactgg
                                                                    960
agaatataaa aaatacacag ttaattttag aaacaaaggc tgggcatgat tccatcctaa
                                                                   1020
gcagcaattc ttcaggtagc tgcccagaaq qqcctqqaqc tcctctqqac cactqctqat
                                                                   1080
ctccagatac tccctgagaa ccgtcacctc ggcgtccaat tcctgagtgg ttttcactac
                                                                   1140
taaataatga ctcagtgacc cagtctcttg gccaggacgc tgttatggaa tttgggtcgt
                                                                   1200
ttggcacttc ctgcctggtg cccacctgtc tagattactg gacccaagta ggtccagtat
                                                                   1260
ctccctggtc cagccctgtc ttgagtccat cacctttatc attaagaagc agccagtaga
                                                                   1320
ggttgatgat gatcaggtac gttctctcca caattttcat ctaaggaaat cctcgtctcc
                                                                   1380
ccttttaaaa caaggctggg ctcaaacttg taggatccag ttttaacatc ttgtaatgct
                                                                   1440
tatacatttt tattgaagtg taccaacgtc ttatctcagt ttggacatga atttaaagat
                                                                   1500
atttccaatt agctagagag aagagttaaa acatagaaga acataagctt tttacatcta
                                                                   1560
tatttgacag tgacatatgt ttttattata catgcattgt gtagattctc tatgaaaatt
                                                                   1620
aagacccttt taaataaaaa aacgaaggct ggaaatgggt gtattcaaaa ccctttaaaa
                                                                   1680
tccttaaggg agttttgcta tagaatctca ggataaagac agactccgac aatattcatc
                                                                   1740
cagaaatttt catgtaagtc agttgtttga aacttgggat ttatttttct cttagaaact
                                                                   1800
1860
tgtaataata actgcgttta cttgttcata ttgggttttt attgactaaa agcttccagc
                                                                   1920
ctctttttca tgcagccagg ataacagtga taccaaaacc tatcaaagat tagaccatcc
                                                                   1980
tacccccaaa atataacaat aggccaatat ctctaaaaaa tatgtaacaa cagaaaaaaa
                                                                   2040
aa
                                                                   2042
```

```
<210> 5672
<211> 2937
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2761)...(505)
<223> similar to gi3135968 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5672
ttttttttta ttttataatt ctttttatta ggaaccagtt acctaaacaa tgtaaatgca
                                                                       60
ttagaccagg agcatactag atccccgatc tagttactcg aagcacaaat tctattggca
                                                                      120
aaacatgcat aaacatacac attctagatg caacacagca aaatgctgat gtatagtaaa
                                                                      180
cccccattca agaaaatatt gtaaatatac aaaactgatt ataaaacttc ccaaactacc
                                                                      240
tttgaaataa tctactccaa agccttcatt ccataaagga aactaaagct taaaacagta
                                                                      300
ggagttttct aatgtcacag agtgggcttt aataacaatt gggattagtt cagcccaatg
                                                                      360
gtactttcca ttccataaca tgatagtgaa aatttaaaag atttcaaggc agtttctaaa
                                                                      420
tecaetetga ttetteagta ettaacaaaa ggacaaaeta aagtaaatat eteeettaaa
                                                                      480
tttatgatgt tcctagaatt gtcatatgcc aggatgcagt ctctgatgtt tgttgagagc
                                                                      540
agagcgatat ctgaaggatt ttccacaatc attacatcca aaaggcttct ctcctgaatg
                                                                      600
aattototgg tgotgaatga gatatgtgot otggotaaaa gtotttooca cattoattao
                                                                      660
atttatatgg tttttctcca gtatgaattc tttgatgttg agtcagatga gtgctccggc
                                                                      720
taaaggcttt gtcacattca ttgcacttat agggcttctc cccagtgtga attcgttgat
                                                                      780
gctgagttag atgggagctc tggctaaagg tcttttcaca tttattacac tggtagggtt
                                                                      840
tttcttctgt gtgagttttt tgatgttgag caagagatga acaatgtcga aaggctttac
                                                                      900
cacactcage acactcataa ggettggete etgtatgaat tetettatge tqtqtaaqqt
                                                                      960
gtatgttctg gttgaatgct ctcccacact cattacactt gtaaggtcgt tctccagtat
                                                                     1020
ggatcttcct atgctgaata agggatgaac cataactgaa ggttttccca cattcatgac
                                                                     1080
actgataggg tttctctcca gtatgaattc tttcatgctt agcaagagat gaactccgaa
                                                                     1140
taaaagcttt cccacattct ttacattcat aagctttctc ttgagtatga gttttctgat
                                                                     1200
gctgattaag gtttgagaga taactgaaag cctttccaca ttcactgcat tcaaagggct
                                                                     1260
tttctctcgt gtgaattctc cgatgttgag taagggatga gcagtaactg aaggcctttc
                                                                     1320
cacattcatt gcatttgtaa ggtttttctc cagtatgaat tttcaggtgt tgagcaaggg
                                                                     1380
atgaccagta actaaaagat tttccacatt ctgcacaatc atagggtttc tccccagtat
                                                                     1440
gagttttttg atgctgagtg aggtttgagt gctggctgaa ggctttccca cattcattgc
                                                                     1500
attcgtacgg tttttcccca gtatgaatca tatgatgacg gataaaagtt gagggcccgt
                                                                     1560
tgaaggcett tecacattea ttacatttat aggtttttte tecagtatga attttttgat
                                                                     1620
gttgagtaag gtgtgtgctc ctggtgaagg ttttatcaca ttcatcacat ttaaaaggtt
                                                                     1680
tttctcccgt atgaattttc tgatgttcca taaagtggcc tctctggcta aaggcttttc
                                                                     1740
cacactcatt acaagtgtat ggcttctcgc cagtatgaat tctctgatgc tgaacaagat
                                                                     1800
gggtcctctg actaaaggct ttcccacatt catcacattt atatggtttt tctccagtat
                                                                     1860
gaattetttg atgttgagta agagatggae eetcaatgaa geetttteea eactgateae
                                                                     1920
atttatatgg tttatctcca gtatgaattc tttgatggtt tataaggttt tcactccggc
                                                                     1980
tgaaggcttt ttccacaatc aattacattt gtagggtttt tctccagtat gtgttctctg
                                                                     2040
atggcgaata agagctgaac aataactaaa ggctttccca cattcattgc acttacaaga
                                                                     2100
tttctctttt ttaactgggt ttgaattctg tttgatgctt cttttagtag aggtctcttc
                                                                     2160
tggagatggt tcttgtgtta caaggtttga actcacattg acacttttcc caaattcatt
                                                                     2220
atttacaggg cctttttccc aactgggtat tgtcttttcg gttaccttta tttcctttgg
                                                                     2280
cagtgtctgt tggtttgcct gctgtctctc taaactgcct tcatattccc aactttctag
                                                                     2340
caagttggaa ctccaagaat catctctttt gtgtttttcc actattacct ctggagatag
                                                                     2400
ctcttcttca gaaatgtcag gctctggggc tgacacacta ttttcaagtc ttgtctccca
                                                                     2460
gtctgcacag gtacctactg gaatgcttgg ctccatgatc catggctctg tcccttgctc
                                                                     2520
taactgggaa atcacatcag gtttagaaac ttggagtcct atagagacca ggtgtgtata
                                                                     2580
attttccaat gtcacatccc tgaacaaatc tctctggcca gggtccagct gtttccattc
                                                                     2640
ttcctgggta aagtccacta tcacatcctt gaaagtcacc gattcctgaa aactggctga
                                                                     2700
tgagagtaga ttatgtcccc cttggagaag ggtggagtct ggagaggaca gatcttccat
                                                                     2760
ctcaggagct catcccgttc ctctggaact tgaacaccag ggttcgccag gcagcgttcc
                                                                     2820
ttcagctggt atctcggtct aggactcaga tgtctaactc cccttgcagg gaatctgcaa
                                                                     2880
cacgctgagg ttgtctaccc tgttgcagag cgttaaagct ggaaggtgga caagcaa
                                                                     2937
```

```
<210> 5673
<211> 3883
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3848)...(422)
<223> similar to gi396815 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5673 ttttttttt ttggagctta ttagaacatt tattttttc tgaatgacag gccgggagtg 60 ggagtagctg aacagggcat gttagtggtg tgagtgctgg cttaagcgaa ggagctggag 120 tgggggtttg tgttggggga gcagtgggat gggaaacaca cctgtggggc agctgaacta 180 gaaagaagga tgcccaggat agctatgaga cacctacaaa gcatgggaac ccagttcccc 240 taagcccacc ccatccccag atccctttt ttctccctta agttaaaaaa attcctttga 300 ggcagcttaa gtcaagaggc ctgtaagggg tcaagactgg gtcacaggtt taggacagca 360 gagttttgct cccggccagc agagccaagg ttctgggctg ggatgggcag cttcagggcc 420 ttcctcagct gtgggcattc aattgcccgc gtaagtgaaa gtttttcaaa cagcgacatg 480 gtttcacata gggccttcct gggcttccaa gcatgcgggc ctagctgtta gcgcaatctg 540 ggcaaagggg ggttcgcttc atagggacgg tcccgccagc actgacgcat cagctcgtac 600 acttcatcgt cacagtttcg aggctgctcc atgcggtagc cctggggcag cttttcatag 660 agctcggcac aggtcatgcc acagtagggt gtacctccaa ggctcactat ctcccaaaga 720 aggactccaa aggaccagac atcactcttg gtggtataga cactgtagtt cagggactca 780 atggccatcc agcgcacagg gagacgccc atcgtcttct tcacataaac ctcctctccc 840 cgagaaaggc cgaagtctgc aatcttggag gctaggttct ctccgaccag cacattccqq 900 gcagccaggt ccctgtggat gaactgcttc tcactcaggt actgcatgcc attggccqca 960 tcactggcga aaacgcagca gctgccggga gcctaagggt agaggctgtc ccatgctctc 1020 gagcaaaagc tgggtcagtc tctaggaccc ggcttttccg cagaaaatct agcaggttcc 1080 cgtagggggc atattcaata gcgatataca agtaacctcg gttcttacag gcccccagga 1140 ggttgatgat gttggggtga tgccccaatt tgcacagaac ttccagttct cccgcaaagt 1200 cacgatggtc attttcagag gcatactctt tcagcatttt gatggctgcg ttcatcttca 1260 gcccgtcctt cttgatcatg gcccggatga cctggccgaa gttcccctcc ccgatgaggt 1320 cctcaaaggt gatgtcctcc cactctagca ctgggtagct caggggctcg ggctgcagtt 1380 ttggccgccg ggtaagtgtc aaggtccctg agctgaactg caggatggtc tcctcgcccg 1440 agcctgactg gtaggtgaag gtgcgtctcc gatgcaggca gcttctgcgg atgcacacca 1500 gggttaaaag ggcggccagg atggtgaggc aggtggcaga cacggagccc accaccgcca 1560 ggatcagctg ctgatccagg ccctcttcag ctgcccggct ctcttggact gggccctcag 1620 cctgcagccc gttgcccagg gtggactctt ctactgtgtt gctccagtcc ccgaqcccct 1680 gaatgctggc ccgcatgcgg aagaggtagc gcgtgctggc gttgaggcca cggatgatgg 1740 tgcttgtctc ctcaggcctg tccacgtcta tccacagtgg gtctcctgca cccccagcca 1800 cctgcacctc cacaacgtac ttggatattg gcccaggcag agcctccggg tgcttccatg 1860 tcagctggat ctcggagtct gagaggcct gggcgtggag gtgtcggggg gctggaggcc 1920 cactgggggg cagaagcacg tgtgcagggg gcgaggccgg gcccaggagg gtgcagtggt 1980 agagctgcac atccagctgg tagtgggtgc caggcgtgag tcccgtcagg agggcagtgc 2040 gggcctgggg ggatgagacg ttctcccgcc gctcctgccc ccgtgtcccg tcccacaggc 2100 gcagcaggaa accgtcgccc accagtggcc cgggcaccaa gggcaaggac cagctcactc 2160 gcagccggtc agtgccttcc acatgccagc cctccaacca cqqctqcaac aaaqqctcaq 2220 gacagtetgt ggteatgagg gtgggaggee eccaqqeee eteteetet teceetqqee 2280 ggctcagctg cacacgaaca ctgtatcctg tctttggcct caggttcatt aacgtcacgt 2340 tctcactggg qtccaccaca atggtcgacc agtccatggt actgtcctgg ggccggtagt 2400 gcaggcggac agtggagatg ggtccatccc caqagaacga qaccaqcqqq qagaccacaa 2460 gctggcggct ctgcttggtc aggagccgag gtgcagccag gggcacqqqq ggcactttca 2520

<210> 5674

```
cattgacctt gaagcgccgg ctgtcttggc cgccagatgt ggacacacgg cactcccaga
                                                                     2580
acceaetgte egeaagaace aageggggea cetegaacte agetgtggte ttetetgget
                                                                     2640
ccacaatggc cttggtggac aggagcacag tgccgtctqg cttqcgtagc tctatqctqc
                                                                     2700
cccgcacggg gaaggggttc cctgcagctg cacagttgat ccggggcatc gtctctaagt
                                                                     2760
tgaactccag ttctgaggcc atgttgagga tctgggggat ccggtctgac ttctcacagt
                                                                     2820
gcactccatg ccacccagag gggcagacac aaccactgaa ccggtcacaa gtgccaccat
                                                                     2880
tctgacactg gcactggagt cggcaatcag ccccaaaatg accaggggca caagcttctt
                                                                     2940
ggcactggct tcctctccag ccagatccac aagaqcaqcc ataqqqqtct qqqaqqcaqa
                                                                     3000
aggtgaggcc ccggcagcct gatatgcctg ggcactgctc ctggcagctc tgcccaaaac
                                                                     3060
ggccctctct gcaggcctgt tcacagcggg tgccagtgaa gccagggggg catacacatt
                                                                     3120
cgccgtcatg gtcgtggcag acacctccat gtaggcaacc tgggcactcc ttggtacagc
                                                                     3180
ctggccccca gcgcccagcc ccacaacccc gcacgatgag ccgaaagaag gcgctgccca
                                                                     3240
qqqqqctqqc ttccaqqtaa qtqqcactqt agatqccqct cgatqqtqqc tqcacatttq
                                                                     3300
qqaqctgcaq caggaaccgc ccatcctggg cttcatgcca gtccagggtg tagaagtagg
                                                                     3360
atcogttgct cttccagatc acgtctgtct gcttctcctt gtgcacacgt gcagaaagta
                                                                     3420
cagcggtgtc acctttgttc acagtgtgtg tgaccttgtc tggaagcagg tgggctccag
                                                                     3480
ggctgttgtg cacgtagatg acgcgcgtgc gccgcgcccc agcaccgccc acgcaggaga
                                                                     3540
agacgcccac gaggtccgag ggcttggaga agccgcgaag cgtgacctgg tgcgaaccgt
                                                                     3600
tgcgcgccag gcgcaggggt ggcccgggcg gggtgcgcac gatacggtcg tccttctcca
                                                                     3660
gcagcagggg cgggcccag gcgtccqagc ccctccccqc cccqqcctcc ccaqacacqc
                                                                     3720
aagtcaggaa gaagcgctgg gggtccgtga gccgcaggtt ggccagcagc qtcaqqtcca
                                                                     3780
ccgccgcgcc cacatgagaa gccaagaaga ggatggggag caagaaaggg ggcacccgcc
                                                                     3840
agaccatact ccagaggccg acccaggcca gccaggacga gcg
                                                                     3883
```

```
<211> 4588
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (166)...(2962)
<223> similar to gi4240287 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5674
ccctgaggcg gccgtggtta ggcggctccc cggcggctcc tccgcggcgg tgacggcgac
                                                                       60
egeacteece getteeeget eeeegegete eteegeeegg gteegeeage egaggeeget
                                                                      120
cccgagcgtc ggaagatgcc ggccgtgtcc aagggggacg ggatgcgggg cctggcggtc
                                                                      180
ttcatctcgg atatccgcaa ctgtaaaagt aaagaagcag aaataaaaag gataaacaag
                                                                      240
gaactggcaa atatcagatc aaaatttaaa ggtgacaagg ctcttgatgg ctatagtaaa
                                                                      300
aaaaagtacg tetgeaagtt getetteate ttteteettg gteatgaeat tgaetttgga
                                                                      360
cacatggagg ctgtgaacct gctgagttca aacagataca cggaaaagca gatcggctac
                                                                      420
cttttcatct ctgtgttggt gaactcaaac agtgagctga tccgcctgat caacaacgcc
                                                                      480
atcaagaatg acctggccag ccgcaacccc accttcatgg gcctggccct gcactgcatc
                                                                      540
gccagcgtgg gcagccggga gatggccgag gccttcgccg gggagatccc taaggtcctc
                                                                      600
gtagccggag acactatgga cagcgtgaag cagagcgcgg ccctgtgctt gctgcgcctg
                                                                      660
tacaggacgt coccegatet tgtccccatg ggcgactgga catecegagt ggtgcacetg
                                                                      720
ctcaatgacc agcacttggg tgtggtaact gcagccacaa gtctgatcac cactttagca
                                                                      780
cagaagaacc cagaagagtt taaaacctcc gtgtctctgg ctgtctctag gctaagcaag
                                                                      840
```

aatcgtgacg tctgcatcca cagatctcca ggattacact tactaatttt gtcccggctt 900 cctgggcttg tctgtcaaac tgctgagact gctgcagtgc tacccacccc cagacctgc 960 agtgcgaggc cgcctgactg agtgcctgga gaccatcctg aacaaagccc aagaaccgcc 1020 caagtcgaag aaggtccagc actccaacgc gaagaatgcc gtgctcttcg aggccatcag 1080 cttaatcatt caccatgaca gtgagccgaa cctgctcgtc cgtgcctgca accagttggg 1140 ccagtttctg cagcaccgcg agaccaacct gcgctacctg gccctggaga gcatgtgcac 1200 gctggccagc tctgagttct cccatgaggc tgtcaagacg cacatcgaga cggtcatcaa 1260 cgccctgaag actgagcggg acgtgagcgt gcggcagcgg gccgtggacc tcctctacgc 1320 catgtgcgac cgcagcaacg ccccacagat cgtggccgag atgctgagct atctggagac 1380 agctgactac tccatccgag aagagattgt gctgaaggtc gccatcctgg ctgagaagta 1440 cgcggtggac tacacctggg tatgtggata ccatcttgaa cttgatccga attgctggtg 1500 attacgtgag tgaagaggtg tggtaccgag tcattcagat cgtcatcaac cgggacgacg 1560 tgcagggcta cgcggccaag actgtgttcg aggctcttca ggctcccgcg tgccacgaga 1620 acctggtcaa agtgggcggc tacatcctgg gggagtttgg aaacttgata gctggagacc 1680 cgagatecag ecegetgate cagttecace tgetgeacte caagttecae etgtgeageg 1740 tececaceeg egegetgete etgtecacet acateaagtt egtgaacete tteceggagg 1800 tgaagcccac catccaggac gtgctgcgca gcgacagcca gctcaggaac gcagacgtgg 1860 agctgcagca gcgtgctgtg gagtacctgc ggctcagcac cgtggccagc accgacattc 1920 tggcgaccgt gctggaggag atgcccccat tcccggagcg ggagtcctcc atcttggcaa 1980 agctcaagaa gaagaaggc cccagcacgg tgacagacct ggaggacacc aagcgggaca 2040 ggagtgtgga cgtgaacggg ggtcctgagc ctgccccagc cagtaccagc gccgtgtcta 2100 cgccttctcc gtcggcagac ctgctgggtc tcggggctgc ccccctgcc cccgcgggcc 2160 ecceaecete eteeggegge agegggetge tegtggaegt gtteteagae teggeetetg 2220 tggtcgcgcc tctcgctcct ggctccgaag acaactttgc caggtttgtt tgtaaaaaca 2280 atggtgtgtt gtttgaaaac cagctgcttc aaattggact taagtctgaa tttcggcaga 2340 atttaggtcg gatgtttatc ttttatggta ataagacctc cacgcagttc ctaaacttta 2400 ccccaacact aatctgttca gacgaccttc agcctaacct gaacctgcag accaagcccg 2460 tggacccgac cgtggagggg ggcgcgcagg tgcagcaggt ggtcaacata gagtgcgtgt 2520 2580 acgtgtctgt gcagctgccc atcactctca acaaattctt ccagccgaca gaaatggctt 2640 ctcaggattt ctttcaacgt tggaagcagt tgagcaatcc acagcaggaa gtgcagaaca 2700 tcttcaaagc aaagcaccca atggacacag aagtcaccaa agccaagatc attggatttg 2760 gttctgcact tcttgaagaa gttgatccta atcctgcgaa tttcgtggga gctggaatca 2820 tecacaegaa aaceaeecag attggatgee tgetgegett ggageegaae etgeaageee 2880 agatgtaccg gctcacgctg cgcacaagta aggaagccgt ttctcagaga ttatgtgaat 2940 tgctctcagc gcagttttag tcctgaggat ggaagaccag gctcgtgtgt cttgtgttgt 3000 cttcgtctgt gccgtttgtc ttcgtggcca tcctgcagat gagcaccgtg tccagtgcca 3060 cagcacaagg cgcctccccg ccccgccgcc ccacacctct cccctttggg ctggacggga 3120 acacacgtgt gtggctcagg aggaaaagct cagcctggac tgtggcagcc acggcagaag 3180 gtggatcttg ggatcaattt ttataaaaat cgagacagtt ctgtggttaa atctacaaat 3240 taaagggaaa ttagaagttg gcgtgaacgt ggcgtttgtg ggagtgtcac tgagatggcc 3300 cgtgctgccg cccaccccgc ctcggagcct ctgggagcag cagtgccact gtgcatggcg 3360 tgggctgagc cttggtgtgt ggccgtcctg gtggctgcac acctggcgtc gtcctgggcc 3420 cttgggagga gcacagctga ccctggtttt gctgcagtcc cagctggact gttttcccag 3480 gcaggatttt aatctagaat ttagaaacat ttgtatttgt aatgacttct ggcaaaagca 3540 egtgteetgg eeggatgtaa etgtteteet tteecagete etgtttgtga agggegtetg 3600 ttatgctcct gcagtcgccg aggccttgga tgtgcagcca ggggaggagc gtcctgccgg 3660 ccccgcaggg cccccaggac tccagggtaa agtgtgggcc ggtggcgcaa gactcagagg 3720 tgtgctcgtc tctttcctgt cagagtgggc gtccccaggc cacggtgcag gcctgagtcc 3780 ttccaccggc cccgtccagt cgtccctgga ggggctgtgg aggaaggacg cctctgtgtg 3840 gtcaggaagt gaaggggcca ttggccgcat gccatgtgcc acctgcggct tgtgtctcac 3900 ctgtcatctg gactcagcac ccaggctgca cgtctgacac ctgagaggcg agagagtggg 3960 gccggcctag gagccaaggc tggggccttg cgctctgtcc ccaggatggt ggccttgttt 4020 gtcctaaaca cacccagcac aggttctggc ttcctgacat gctgtggagg cagggagggt 4080 gggtggccac atgtgcttga gggttttcac cctggccctc agttgcctgc tgtgcgggtc 4140 cctggggcag ctgcaggggc tcatggaccc atcagggtct ccacagctcc cctgcagtgt 4200 gtgcacccca caatgtctgc ggctcttctt ccggcgtgtc gggctttgat cacagcatag 4260

```
ccacgtcagt ggcgtgcgc tctcgcacag gccattctgg gtctggtgt gccaggtgc 4320 gtgacacgcc gtgctgggct tgtgctgcag ctgggtggt tggccctcat tctcatgttc 4380 cagctgctgg gcagtgctct gcctgtgtgc tgcgcctgca ggctgcgtgt gctgccgtgg 4440 atctcctgca tcccttgacc cctcccgcca tcagaggaaa ggctgctccc cgaggcaccg 4500 cttgccctgt gcggcgctgc agaggggccc tcagtgtgc actcctcgtc aaagaaaaat 4560 aaaaggctaga actgcaaaaa aaaaaaaa 4588
```

```
<210> 5675
<211> 1838
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (903)...(1817)
<223> similar to gi57920 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5675 gtaaccttac agttcggatc tcttagaacc cacaagcagg taggcgatcg ctgcttcatc 60 acacttcaca gggagtcctg gatctttcct gtccgtaacc catggacgcc atgattcagt 120 atggcggagg tccggggctt aagttcctgt tcatgcttcc taatcattca tggatccatc 180 acaatgtgct ctgaagggcc tctcttgctg ggattgagaa ggatacattt tttqagcagg 240 tttttatact caatggacat gtagaaggga atatattcta ctcagttccc ctcctgcagc 300 teettgaaat tetgteeate aaaaacaggg atetgetgae cagaggtgae tgeeacagaa 360 ggtatccagt ttgtaaaagc tgaattttgt gctgaagcca gaatttgcaa tcttgatgtt 420 tgtgttaaca tccaacagcg tgttttctgc ctttaaatct ctgtggacaa tacgtttctg 480 gtgacagett gcacageaaa caettttggt agaatttget teagteettt ttttette 540 ctgctgccat gagcaggtat tcacaaactt ctcctcctgg ctagtgtgct tcatgacaaa 600 gcaaagagat tcctcaatat cgatcacagc aaatgtttca ctatgttggg gtgatccgag 660 ccttcatggt tcctactttg tggatggtgt ctggaggaga tctgctgagt ctcatcaatg 720 aacttcacag ctgctgcttt cccagttaag aggtcccagg ccaaccttac cttagccagg 780 ttgcccttga cgatggtctc aaggatccta gctgccagta agggtccctt ctcaqcaqaq 840 atggctgaga ggccctgtgg catgtgagac ttactgctgg gcttggagtc aaggtgtccc 900 aggtcagctt aatttcggga aaaactggta agacgcttgg ttcaaatcac ttgaaaagaa 960 aatcacttgc atagttcacc tgaagaatgg atctctataa tggaattaaa gcacaatgct 1020 ggacaaaaag taagaaaaag caacaaactg aaaggaaaaa ttgagtaaaa agaataaaga 1080 actagaactg gcaacctcag ccaagccagg gaattacata catcttggaa ttccaaagca 1140 atgcttcctt atgagggcat aggaagaaat aaatctaata acaaggctgg gattaattca 1200 cgtggttttc tcacattttg gtctcaagaa ctttttactc taaaactaat tattgaggac 1260 cccaaagagc tttttatgtg ggttatagtt atcagtattt actttattgg aaattaaaac 1320 ctgtaggatg tttcagtggt cttttctagt ttgaagggtt taataatttt tggcttttaa 1380 agagcccata atcaattaaa atattttatt ttcctttaaa ttgtaaatga ttggtgtcat 1440 aatgatgcta caacttaact ggcattacaa tactatacaa atacqttcta ttgtataagt 1500 cacaataagg tacattatta actctataac atttagggga agatagctgt tatcatatta 1560 tttaaagttt tgcctagttt ctttgtagta gacttatctt ttccaggagc cagagaaccc 1620 gctatatcag tttcagtatc tttaaatgta gagattgcag ctgtgtgttg agaaagcacg 1680 tttcacttag catgggatgg ggacttcgag gtactggata tgtcactggc acctcagggg 1740 aggaaaccaa gatgccccta tatgatttta aacatggttt attaaagcgt gatacagaaa 1800 agtgcacaaa ttgtccacct acagcttggt gactgttc 1838

```
<210> 5676
<211> 1020
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (220)...(767)
<223> similar to gill74092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5676 ccgcaaatat tgaatgcttt tcccctaaca caaggataac cactttcatc acttctcatc 60 actggctaga gaacctagcc agtgtagtaa gggaagaaaa agagataaaa aacatacata 120 ttgtaaagaa agaggtaaaa ctgtttaatg catagctcac ataattagtt ttgtagaaaa 180 tcctgtggaa tctacaaaaa tgctcatgaa acttgtgagt ttagaaacat cacaggatac 240 aagatcaata tacagaaatc aattgtttta tatactggtg ataacaaaaa ttaaaataat 300 acagtacaat ttaccacaca tcaaaatatg aaatatttag ggatagattt aacaaaatca 360 agacctgttc actgaaaact ataaaacttt gctatcagaa attaaataag acctgaataa 420 atagaaagat attttttgtt cattgcttgg gaaattcaat attgttaaga tgctagttct 480 ccccaaattg ctctataaat tctatgcaat gtcaaccaaa atctctgctt ttaaaaaaat 540 tgacaaactg attctaaaat tcctataaat gccaaaagcc tagaataatg aaagcagttt 600 tgaaaaagaa ggagaagttg gacaagtaca aattttgaga cttattataa agctaaaata 660 atccagaaaa tgtggtattg acataggata catatataga tcaatggaac aqagtagaga 720 gaccaaaaat agattcaatg tatagggtga attgattttt gacaaaagtg gcaaaatact 780 ttaatgggga ggatggtagt cttttcaaca agtgatgcta gaacattgag ttctagcacc 840 agtagaacta gaatgtggaa aaagtgaact ttgggcatat catgttgaaa aataactcaa 900 aatggatcac agacctaagc acaagaactg aaaatataaa acctccagaa gaaaacatag 960 gagaaaatcc ttgcaaccat ggaatgagca aagatttttc agggccccca gtgcatgaaa 1020

```
<210> 5677
<211> 2856
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2619)...(2456)

<223> similar to gill10587 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5677

```
tacgagtaca gcttccgcac agagcagagc gcagccgcca ggctcccgcc cagccccacc
                                                                     60
aggtgtcagc agatcccgca gtcctgagga gccagcggcc acctgcgggg agaccaccgc
                                                                    120
egeceagact actgaeggea ggggetgetg ecceegeete etectgeege etecgeeage
                                                                    180
cctccctccc acactgcccc agcagggctg gcccggagac tgggcagcta agtgggcgca
                                                                    240
tcctgtcttc agctggcctg actgacaccc cggcctccct ggggacattg ttcataacca
                                                                    300
tgactaatct gtgtgtgctg tagtgaccag cggctcctaa cgtgtctgtg tgatgaccag
                                                                    360
ttgtcctcca aaaacctcac tcaccacgga gtcaccctga gggccccggg cagttgccct
                                                                    420
ggccgcccag tgacgcccac cggctccctc cgctccctcc tgtcacctac cagggcagac
                                                                    480
cccactaagc cgttgagtct cttcctggaa gaccctgagg qccggcagct ttgcctagga
                                                                    540
ctctccaggg tcgctgatcc tccccggccc agggctgcca ggaacaagtt cctctctgca
                                                                    600
ggateteaca geageeetga gaagaeatgg gaggaagaag eeagtggeee tggggtggae
                                                                    660
cctgcccttt tggacatccc atggacttgt cacccagtcg cctggaagtc ggggagcagc
                                                                    720
acccctgccc ccggtggagg ggttgttgct ttctggggag gaggacggtt gacggccctg
                                                                    780
cttggatcca ccaccaggac gctgtgctcg gccatggcgc gcctccccca agggctcatc
                                                                    840
tgtgcaacaa ccacatgcca acaatagctc caggtgcctc agccccgtgc cctgacccgg
                                                                    900
ggaccacagg gacaccetet gagacgtget ggececagga ggatacagge acacgggeae
                                                                    960
ccagcccctc tcagagccag gcgtgtcttg acggtatctg ctgacgggaa caagtcattc
                                                                   1020
tgaaaggtcc ctctgaccca ggtcaccaaa tttgggccag aactggcact tccgagtgcc
                                                                   1080
cactggtgct ggcgtcctca aagtgccggg cgccaagttc agccccaggt gcgtttgcct
                                                                   1140
aggcagtggt ggctgccatc cctcggggcc caggccctca cccgaagggc tgcctcactc
                                                                   1200
tgtggtgtca ggcactgggc tgtgtcctga ttcctcagag tatggggacc tgacatcttt
                                                                   1260
gggtccccaa gagttggctc ttggatgtgg aggcttgatg ctgcggttgg gggctgcact
                                                                   1320
acctgcgtcc gtggaagcct ctgcctcagc ggggacggcc tcctgctgca ggtcctgggc
                                                                   1380
agcccacagt agtgctagct gaggcccaga ggaacgggag gaaagggagg cagcgccgga
                                                                   1440
cggcgcagct ggccaagagg cgggcggggc cagaaatacc tcatgcccct gcaccagccc
                                                                   1500
ctccgtctcc aggccccagg cctctttgtg gacccatctt cctcctctgc caccccgatc
                                                                   1560
ttcactcgga tacctcttga tttctgtgga taagggaagc ggccacttct ccctcctga
                                                                   1620
gacccgagga tgcccctggt gggggtggcc ttctcaggac tcctgggtqg cacaqcaqca
                                                                   1680
ggaccttgtc atgggactga tgctgagcag ggagggggct gccaggctgg ctgccgatgc
                                                                   1740
teegtteaca taageeagtg tggttetggg gaeetgagga geeetgtgge acceaeaggg
                                                                   1800
ggcacctatg tctgccgtgg ctcctcgggt ggtgccctgt gtgacaaagc ccaacagcaa
                                                                   1860
gggtgactcc tggcaggtgg gggcagcagg agggcagagg gcagagctct ggccacttct
                                                                   1920
geocaettea ttagggtttg tgaaetttgt eetteaeete ttttegtgee etggttgtga
                                                                   1980
gattgcctct aacaggtaat gccaggggcc cttcactccg cccccatgac tgggaagagg
                                                                   2040
cctgtggcag cgccgctgga ccctaggagg ctcagaggca gtggtgtggg agccctgtct
                                                                   2100
gcaaggacgc agaataagca gtgagggcgg ctgcaggaga ggaaggggct cccacagccc
                                                                   2160
ccactgatgc cgctgcaggc ccctgtcgag ctggggtccc agccaggtgc ccccqcatqc
                                                                   2220
cctcctgcag ttgctggatg gatagggaca ccaggaagag gacaaactgc atggactcaa
                                                                   2280
gcgagctgga gccatcttct ccatagcatt acggacttag cataagagta aatgactgtg
                                                                   2340
aacgttgtag taaacggcag cttaagataa gtaagcagag acagtgttaa ggacgagttg
                                                                   2400
gtgtctgtgg tagcttttag gctgctccta acccaccatt tattgccttc tgagaggtgg
                                                                   2460
2520
acgcacatge gtgtgtataa geecacetga gtggggeteg tgeaggagaa etgaggeatg
                                                                   2580
aaactctggc tcaaacctag gaattgagag cgtttctgtc ttttgggaga gtacttttct
                                                                   2640
ccacgagccc tctggccact gtgggaggga aggacaaggg ttcccttgga aatgtgaagg
                                                                   2700
gtcttggcct catccctcag gtccccccac agcacttccc actacttgct tctgtccctg
                                                                   2760
ctggcagcct ctgtccctcc agaacggcta accagagcac actgtcccca ccgcctcccc
                                                                   2820
tttctctctg gaaagttgaa gtatctccaa aggcct
                                                                   2856
```

<sup>&</sup>lt;210> 5678

<sup>&</sup>lt;211> 3556

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (3486)...(1910)
<223> similar to gi2264346 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5678 gatgttaaca tactttgttg ctatatggaa cttaactctc tactgttttt ttaacaacaa 60 aagctaccct tatacaaccc accaatttaa tgaacaccat actttataaa ttaatacaac 120 qcaatctaaa tgcaccataa atttatattt gttaatcttg atattagaac atttttacat 180 ttcaaactac ataaaaatat aacaatataa aatagaaatt tgttgacaac ttacgtccaa 240 aacatcacta tttcttatat tgcaactaag caacaagaca gcttacacag ctctccagaa 300 aacatagtgt tttttgtgtt atcaacaaaa atcagcacaa tcccacacaa taatgtcttc 360 aatttattat cttttccaca gtacacattt ttcacaaacc gtaaatcctt tgcagttatt 420 caaagtgtgt aaacaattgc ctgaatcccc atatcccccc ccctcggctt aaggttgtga 480 atgttttaag toottcaatc aagtttcaac tottccactt gcataaggaa tcaagagcot 540 tctctcttta aaatatgtgt gttttatcat acagcctgca atgcagtaaa tcacagtgaa 600 agccctgggg aaaacaaaac aacatgatct ttacaqcqqq acttqaaact tcacaatagt 660 aaatgcagtt caagaagctt cccataataa aagcgcgggt tttcatttcc agaaatcaag 720 tcaattagaa accctaggtt ctacttaaaa acccattttg atttaaaagt gaaaacagtc 780 ccctatccat agtcatttta taaactctat acagtttcac ttgcagagat ttttttttt 840 ccagtctgga aaacagtagt gcaattacgt tttacttctt ttaagttata tagtccagga 900 tgtaaatagc tctgtggaaa gataagaaga tgctctggta aacaagaaat ttttgcaagc 960 ccatgctggc ttacgagtcc attaaagctt gtaagtccat cgtggctttc aacaaaatqt 1020 tgcatataca tcactgagaa caaagcagaa ataaataggc agaaatgact gtaaactgtc 1080 tcatttcaat gatttttcag taataactgg cttgatgaat tgattatata tagtcactta 1140 aataagcaga cagtagacag ttgcccttct ggatgttcca ctatggcatc cggcctggaa 1200 agccccaatg gagttacatt cctaaaatta aaccaaaaaa aaggtgggga gtggaggtg 1260 ggggataata gtttacagat gccacttgaa catgattcca tcaagtcagc cagttcactt 1320 agatttcttc ttaaaaaggc ttttgatttt tgatggcttt ttgcttttct ctccattatg 1380 acaaaggtca tgtgggatgc tgcttattct ggcaacactt ggggcttcct gaactggttt 1440 actgtcgttg ccagctgagg aacatgatgt gtggcgaggt ttaggcaccg ggatgccact 1500 ggaaagctgg ttcatgctac aggatttctc caaaatgcca ttgtacactt tgcttgcagg 1560 actgaagatc atactcttag tttctgtcag acctacacag tcgggagaac cccaagacac 1620 atccacagtt acaggegaat cccctcggga ggaatcctct aqqqacacct catctcttga 1680 tatetttege ggagataatg tttggtatat etegaggett aaaggaggag aetgttteet 1740 tccaatggaa gaatttaagg agtcacattc tgaagctgtg tctggcactt cccattgctt 1800 ttcagcagag aagtaaatgg cctcttcctc ctcttcattt cgataaagcg cagggcaact 1860 tgacactgag aggatatctg gatcagggga aggcaaggag tgtggtgtgt gttgcgggtg 1920 gtgagggtgc cgagggtgtg acgggtgggg ggcgtgtgga gcaagctgag ctcqctqaqq 1980 ctgaggcgag gacggcacaa tgctgcggcg tgaacggcac aggctgctgc ttctggctaa 2040 tgatccagga ggtttagcca tggtcccggg aaattgtgac actattgggg gtgtgtcttc 2100 atctaagtca tcaactcctc cagcaattgg atagggtgga atggagactc tgggcatcac 2160 cacccagctg tgatcagaat aaagggaaga ggtcaggctg gggagtcctg agttatgggc 2220 tatctgaaag ccacagatct tctcaatttg ttgccagcga aaaagtcgtt ctcgtaaaca 2280 agttgtcaac tcagagagag ctttctttgc ttccagaatt ttgtggtcta cctcatctag 2340 2400 ttctgcctca tctttagcaa tagctagctg catttcagcg ttttgtcttt taatattgta 2460 gtattgcact totacttcat gtgttaactg aagccatttc tgaagtgcat ctggaacaga 2520 ccaactgctt ctcagttcaa attcttttc ggcctttttc agagccatgc gaacctgttc 2580 caattcctgt tctgcatact gacgtctact caattcacat tcagctccct cccttagctc 2640 tctcagccga caagcctcct cctttgcata attgatttca tccatcattt tgcgctataa 2700 attttgcttt tctacagcaa catttctgtt ttcttcctgt gccttttcaa gcctctcttg 2760

```
taagtccatt agactttgct ctgcagtttg taagctctct aaatctttca tcatttttgc
                                                                     2820
aacatgttet titgatgtet tattetgegt ataageaaae cageageete caacaceaat
                                                                     2880
tactatagaa actgtgagga taaaatcttt catccagtta tgaggtgggc gtgttagagg
                                                                     2940
tccaaacaaa accacatcca atgccttgag ctgaagtttt tgtctgtgac tccggtcact
                                                                     3000
gattttcaac tgggagatca taaatgaagg ttcgtgcact qctatcctqq qaaqtqtcqt
                                                                     3060
tcctttgaca ttgttgtctc taaaattctt ctcatattgg ggtagttcaa caaactctat
                                                                     3120
caaccactga agagtgtctt caagggtcca attatgaact tctgatgttt tccatcgttt
                                                                     3180
ccataaatcc tcaatcgtta tatgtttatc ttctctgtgc agatggctgt gtttattagt
                                                                     3240
agcatcttta tatttcatat cttctctgat gaattcatca ctttcctcta cttcaattcc
                                                                     3300
accatctttg tcatcatcca tttgtttatg tattgtttga agagcttcca gactaaatct
                                                                     3360
gtcttcttct gtaaagcatg gtggactcag tgacatgcag ggatcttatg gctggacttg
                                                                     3420
gtgtctcatg cctgtaatcc cagcacttct ggaggctgag gagggtggat tgcttgagct
                                                                     3480
cagaagttcg agaccagcct gggcaacatg gtgaaacaca qtctctttta tttctcttct
                                                                     3540
tttctaggtt atattc
                                                                     3556
```

```
<210> 5679
     <211> 446
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
    <222> (150)...(24)
     <223> similar to gi3649785 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5679
cccgccactc ctgaggagaa ggggacgcgc ggcgcgctcc tcaccgggcc cgggcccagc
                                                                       60
geetategee geeeaegega geeteaegaa teeaggaatg eggaaceega ggataetgag
                                                                      120
ggccactgta cattgcaaaa aaatgggaca aaagacttag tggaaagggt ataaaagctg
                                                                      180
atgaagcaga gcctgaggat tttgtggtgg aaaaagtact acaccaaggt gtggtgaatg
                                                                      240
ggaaggtgga atattccctg aagcggaaag gatttacact tqctqacaat aattqaqaac
                                                                      300
ctgaagaaaa cttagatttt cctgagttca ttgaactatt tcttaatcct caaaaaaact
                                                                      360
ggtaaaggaa aagatagtac aaaaagaaaa tctttatccg agagtgaatc tgatgacagc
                                                                      420
aaatgaaagg gatgctgctg aaaaac
                                                                      446
```

```
<210> 5680
<211> 1979
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (405)...(1824)

<223> similar to gi4154598 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5680
gaaaagctgt gttaaacttc tctgcatctg gaagtgtgat ttcccttact gggtccaatc
                                                                       60
caatgcatga tgctagcatg tggcatctga agaaaaatgg aataattgta tacctggatg
                                                                      120
tacctctact aaatctaatt tgccgcctaa aattaatgaa gacagatagg attgtaggtc
                                                                      180
agaattctgg aacatctatg aaagacttac ttaaatttag aagacagtat tataagaagt
                                                                      240
ggtatgatgc tcgtgttttc tgtgaaagtg gggcttcccc agaggaggta gctgacaaag
                                                                      300
tgctgaatgc aattaaaaga taccaagatg tggactcgga aacattcatt tcaacaagac
                                                                      360
acgtttggcc tgaagactgt gaacagaagg tttcagcaga attctttatt gaagctgtaa
                                                                      420
ttgaggggtt ggcttctgat ggtggcctct ttgttcctqc aaaqqaqttt ccaaaattaa
                                                                      480
qctqcgggga qtggaaaaqc ctagtaggag caacctacgt agaaagagca cagatactgt
                                                                      540
tggaaagatg tatccatcct gcagacatac ctgctgccag gttgggagaa atgattgaaa
                                                                      600
ctgcttatgg ggaaaacttt gcctgctcaa aaattgctcc tgtcaggcac ctttcaggca
                                                                      660
accagttcat cctggagttg tttcatggac caacaggatc atttaaagat ttgtctttac
                                                                      720
agcttatgcc tcatattttt gcacaatgta tcccaccaag ttgcaattat atgatacttg
                                                                      780
tagctacttc aggagacaca gggagtgcag tcttaaatgg ttttagtcgt ctaaataaga
                                                                      840
atgataagca aaggatagct gtggttgcat tttttcctga gaatggagta agtgattttc
                                                                      900
aaaaagcaca aataattggc agtcagagag aaaatggatg ggcagtgggt gttgagtcag
                                                                      960
attttgattt ttgccagaca gctataaaaa gaatttttaa tgattctgat tttactggct
                                                                     1020
ttcttactgt ggaatatgga acaatcttaa gttcggctaa ctccataaac tggggccgac
                                                                     1080
tacttccgca ggtagtttat catgcttccg catatcttga tcttgttagt caaggattta
                                                                     1140
tttcttttgg aagcccagtc gatgtctgta ttcccacagg aaactttggt aacattttag
                                                                     1200
cagcagtgta tgccaaaatg atgggaatcc cgattcgaaa atttatctgt gcctctaatc
                                                                     1260
agaaccatgt ttggactgat tttataaaaa cagggacatt atgatctaag gggaaaggaa
                                                                     1320
aactaggcac aaaccttttt caccgttcaa tagatatttc ttccaaatct ttcaaaccta
                                                                     1380
gaacgacatt tacacttgat ggctaataaa gatggacagc taatgacaga attatttaat
                                                                     1440
cgattagaaa gtcagcatca tttccagata gaaaaggctc tagttgagaa acttcagcag
                                                                     1500
gattttgtag ctgactggtg ctctgaggga gagtgcctag cagctattaa ctccacctat
                                                                     1560
aatacttcag ggtatatttt ggatccacac actgctgttg caaaagtggt tgcagatagg
                                                                     1620
gtgcaagaca aaacttgccc tgtgattatc tcatctacag cccattactc aaagtttgca
                                                                     1680
cctgctatca tgcaggcttt aaagattaaa gaaatcaatg agacttcatc aagtcagctc
                                                                     1740
tatttgctgg gttcatacaa tgcattacct ccactgcatg aggctttatt agagagaaca
                                                                     1800
aaacagcaag agaagatgga gtaccaggtc tgtgcagctg atatgaatgt cttgaaqaqt
                                                                     1860
catgtggaac aacttgtcca aaatcaattc atatgaaagc tttcagagta aattttttt
                                                                     1920
tctagctata agcatgcaat aataaatctc aaacactgat ttggagtaaa aaaaaaaa
                                                                     1979
```

```
<210> 5681
<211> 4567
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (329)...(3922)
<223> similar to gi3882179 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5681 agaggaagaa aatggcagag aatacaaatt tgatgtttcg tcagagttac tagagtggat 60 ttggcatgat aacatgcagt ttcttcaaga caaaaacatt tttgaacata catattttgg 120 atttatgtgg caattgtgta gttgtattcc cagtacatta ccagatccta aagctgtgtc 180 cttaatgaca gcaaagttaa gcacttcctt tgtcctagag acatttattc attctaaaga 240 aaagcccacg atgcttcagt ggattgaact gttgacgaaa cagtttaata atagtcaggc 300 agcttgtgag tggtttttag atcgtatggc tgatgacgac tggtggccaa tgcagatact 360 aattaagtgc cctaatcaaa ttgtgagaca gatgtttcag cgtttgtgta tccatgtgat 420 tcagaggctg agacctgtgc atgctcatct ctatttgcag ccaggaatgg aagatgggtc 480 agatgatatg gatacctcag tagaagatat tggtggtcgt tcatgtgtca ctcgctttgt 540 gagaaccctg ttattaatta tggaacatgg tgtaaaacct cacagtaaac atcttacaga 600 gtattttgcc ttcctttacg aatttgcaaa aatgggtgaa gaagagagcc aatttttgct 660 ttcattgcaa gctatatcta caatggtaca tttttacatg ggaacaaaag gacctgaaaa 720 tcctcaagtt gaagtgttat cagaggaaga aggggaagaa gaagaggagg aagaagatat 780 cctctctctg gcagaagaaa aatacaggcc agctgccctt gaaaagatga tagctttagt 840 tgctcttttg gttgaacagt ctcgatcaga aaggcatttg acattatcac agactgacat 900 ggcagcatta acaggaggaa agggatttcc cttcttgttt caacatattc gtgatggcat 960 caatataaga caaacttgta atctgatttt cagcctgtgt cgatacaata atcqacttgc 1020 agaacatatt gtatctatgc ttttcacatc aatagcaaag ttgactcctg aggcagccaa 1080 teetttettt aagttgttga etatgetaat ggagtttget ggtggaeete eaggaatgee 1140 tccctttgca tcttatattc tgcagaggat atgggaggtg attgaataca atccttctca 1200 gtgtctagat tggttggcag tgcagacacc ccgaaataaa ctggcacaca gctgggtctt 1260 acagaatatg gaaaactggg tcgagcggtt tcttttggct cacaattatc ctagagtgag 1320 gacttetgea gettatette tggtgteeet tataceaage aatteattee gteagatgtt 1380 ccgggcaaca aggtctttgc acatcccaac ccgtgacctt ccactcagtc cagacacaac 1440 agtagtccta catcaggtct acaacgtgct ccttggtttg ctctcaagag ccaaacttta 1500 tgttgatgct gctgttcatg gcactacaaa gctagtgccc tattttagct ttatqactta 1560 ctgtttaatt tccaaaactg agaagctgat gttttccaca tatttcatgg atttgtggaa 1620 ccttttccag cctaaacttt ctgagccagc aatagctaca aatcacaata aacaggcttt 1680 gctttcattt tggtacaatg tctgtgctga ctgtccagag aatatccgcc ttattgttca 1740 gaacccagtg gtaaccaaga acattgcctt caattacatc cttgctgacc atgatgatca 1800 ggatgtggtg ctttttaacc gtgggatgct gccagcgtaa tatggcattc tgaggctctg 1860 ctgtgagcag tctcctgcat tcacacgaca actggcttct caccagaaca tccagtgggc 1920 ctttaagaat cttacaccac atgccagcca ataccctggg agcagtagaa gaactgttta 1980 acctgatgca gctgtttata gctcagaggc cagatatgag agaagaagaa ttagaagata 2040 ttaaacagtt caagaaaaca accataagtt gttacttacg ttgcttagat ggccgctcct 2100 gctggactac tttaataagt gccttcagaa tactattaga atctgatgaa gacagacttc 2160 ttgttgtatt taatcgagga ttgattctaa tgacagagtc tttcaacact ttgcacatga 2220 tgtatcacga agctacagct tgccatgtga ctggagattt agtagaactt ctgtcaatat 2280 ttctttcggt tttgaagtct acacgccctt atcttcagag aaaagatgtg aaacaagcat 2340 taatccagtg gcaggagcga attgaatttg cccataaact gttaactctt cttaattcct 2400 atagtcctcc agaacttaga aatgcctgta tagatgtcct caaggaactt gtacttttga 2460 gtccccatga ttttcttcat actctggttc cctttctaca acacaaccat tgtacttacc 2520 atcacagtaa tataccaatg tctcttggac cttatttccc ttgtcgagaa aatatcaagc 2580 taataggagg gaaaagcaat atteggeete egegeeetga aeteaatatg tgeetettge 2640 ccacaatggt ggaaaccagt aagggcaaag atgacgttta tgatcgtatg ctgctagact 2700 acttcttttc ttatcatcag ttcatccatc tattatgccg agttgcaatc aactgtgaaa 2760 aatttactga aacattagtt aagctgagtg tcctagttgc ctatgaaggt ttgccacttc 2820 atcttgcact gttccccaaa ctttggactg agctatgcca gactcagtct gctatgtcaa 2880 aaaactgcat caagcttttg tgtgaagatc ctgttttcgc agaatatatt aaatgtatcc 2940 taatggatga aagaactttt ttaaacaaca acattgtcta cacgttcatg acacatttcc 3000 ttctaaaggt tcaaagtcaa gtgttttctg aagcaaactg tgccaatttg atcagcactc 3060 ttattacaaa cttgataagc cagtatcaga acctacagtc tgatttctcc aaccgagttg 3120 aaatttccaa agcaagtgct tctttaaatg gggacctgag ggcactcgct ttgctcctgt 3180 cagtacacac tcccaaacag ttaaacccag ctctaattcc aactctgcaa gagcttttaa 3240 gcaaatgcag gacttgtctg caacagagaa actcactcca agagcaagaa gccaaagaaa 3300 gaaaaactaa agatgatgaa ggagcaactc caaataaaag gcggcgtgtt agcagtgatg 3360

```
aggagcacac tgtagacagc tgcatcagtg acatgaaaac agaaaccagg gaggtcctga
                                                                     3420
ccccaacgag cacttctgac aatgagacca gagactcctc aattattgat ccaggaactg
                                                                     3480
agcaagatct tccttcccct gaaaatagtt ctgttaaaga ataccgaatg gaagttccat
                                                                     3540
cttcgttttc agaagacatg tcaaatatca ggtcacagca tgcagaagaa cagtccaaca
                                                                     3600
atggtagata tgacgattgt aaagaattta aagacctcca ctgttccaag gattctaccc
                                                                     3660
tagccgagga agaatctgag ttcccttcta cttctatctc tgcagttctg tctgacttag
                                                                     3720
ctgacttgag aagctgtgat ggccaagctt tgccctccca ggaccctgag gttgctttat
                                                                     3780
ctctcagttg tggccattcc agaggactct ttagtcatat gcagcaacat gacattttag
                                                                     3840
ataccctgtg taggaccatt gaatctacaa tccatgtcgt cacaaggata tctggcaaag
                                                                     3900
gaaaccaagc tgcttcttga cattaggtgt agcatgtcta cttttaagtc cctcacccc
                                                                     3960
aacccccatg ctgtttgtat aagttttgct tatttgtttt tgtgcttcag tttgtccagt
                                                                    4020
gctctctgct tgaatggcaa gatagattta taggcttaat tcttggtcag gcagaactcc
                                                                     4080
agatgaaaaa aacttgcatc ttcagtatac ttcctaaagg gcaatcagat aatggatatg
                                                                     4140
ttttatgtaa ttaagagttc actttagtgg ctttcattta atatggctgt ctgggaagaa
                                                                     4200
cagggttgcc tagccctgta caatgtaatt taaacttaca gcatttttac tgtqtatqat
                                                                     4260
atggtgtcct ctgtgccagt tttgtacctt atagaggcag attgcctccg atcgctgtgg
                                                                     4320
ttcttattat caaaattaag tttacttgta tacggaacaa ccacaagaaa tttgattctg
                                                                     4380
taaagaatcc tctttagctg tggcctggca gtatataaat qqtqctttat ttaacaqaat
                                                                     4440
acctgtggag gaaataaagc acacttgatg taaaaataat tgttttattt ttattgacat
                                                                     4500
gactgattga ttgattgcta ttctgtgcac ttaattaaac tgattgtgat gacttttaaa
                                                                     4560
aaaaaaa
                                                                     4567
```

```
<210> 5682

<211> 3213

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3046)...(644)

<223> similar to gi5457357 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5682
tttttttttt tgtcagaaa agtacagtgt tgacatttta ttttttatgt aaagaagcca
                                                                      60
tatttacata atacattcat atttttaagt atgttacagc tcctgtagaa aaccatttcc
                                                                      120
attaagacag caacaagtga tctggattca atctttaaaa tattaagtca aattaaaatg
                                                                      180
ttcttatcaa gactccaatt taatttcaca gcccatctgc cacaggggaa ctgaggagaa
                                                                     240
acaggaatga agagtgggcg acaaagagaa agcatccctt cccacacgcc aagagtccag
                                                                     300
tgcaacgatc cctgccacac ggtcagccga ccccacttgg tgccacaggg tccagcctcg
                                                                     360
gccactctgg gctcaacctt tccagcacgt ctgggagccc aatgaggcta tgggacagtg
                                                                     420
tgcatttccc tcaaggcctc cggaaagtca cctgccaccc actgtgacct tctgaggctg
                                                                     480
aaaggactta aggactcett teececatea ttteagetgg eecagtgget gggetaaaat
                                                                     540
cagcgcagca tttcccattc ttctgaaaag ccacagctga aataatgcac cagctgaaaa
                                                                     600
ccaccagtgg agagacttga gatgggcctc cctctgggcc tctagttggc aactttctca
                                                                     660
cccgggggct cctcttctc cttttcccgc tccttgttcc agtccttaag gccttctgga
                                                                     720
agtgaggtgt cctcatccaa gctgccagtg ccttccacaa attcttcata ggtaagattt
                                                                     780
ttccgcaaat ggtctggggg ccaaaaagtt caaccatatc attcctaacc aatacttctt
                                                                     840
tttctaacaa cagaagagca accttctcca cgtcagcttt cttttctgtg agaagagcta
                                                                     900
ctgttctttt ataagcatca ttaataagta ttcgtacttc atcatctatc aatcttgcag
                                                                     960
```

```
tggcttcact gtaaggtttc tccaatacca ttgtccccct gacgtgggag gtcaaaggag
                                                                     1020
atttgcccaa ccttttcatt catgccaaac tgaaacaaat ttgggcataa tggcactctg
                                                                     1080
aagttaactt ttcacaagtc atcttgagca ccagttgtaa ttcttccaaa gaagatttct
                                                                     1140
tcagagactc gaccacctaa agtcatacac atcctatcca agagctgctc tttggtatag
                                                                     1200
aggtattgtt cttttggtaa atactgagca taacctagtc ctttqccacg tggqatqatq
                                                                     1260
gatacettta aaagegggte tgegtgetee agataceage eggeaacege atggeetget
                                                                     1320
togtggtatg ccacagtett etteteetca ggetgeaaga acetgegttt tettetetaa
                                                                     1380
gccaccaatc actcgctcaa ttgcctgttc aaagtgtttc tgatttatgg aatctgacag
                                                                    1440
atgccttgca gcaatcaacg cagcttcatt acagacatta gcaacatcag cacctgaaaa
                                                                    1500
ccctggagtt aaagatgcca gttttcttgc caatttatcc ttctccaggg tactgtccag
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ttttagcggt cggagatgaa ctttgaaaat agaagctctt ccttttatgt ctqqtgqtcc
                                                                    1620
aataaagatc tgcctgtcga aacgccccgg cctaagtagc gcggggtcca ggatatctgg
                                                                    1680
tcgattggtg ccggccaaaa tgacgacatt tgttgttgta ttaaaaccat ccatctccac
                                                                    1740
cagcagctgg ttgagtgtqt tctcctqctc actctqccct ccaaaqttqc ctcttcctct
                                                                    1800
cttccttccc accgcatcga tttcatcgat gaagaggatg caaggggcat tcttccqaqc
                                                                    1860
aagggcaaat aagtetegga etetageagg geeeacaeea aegaacatet eeaaaaaete
                                                                     1920
agatccacta acggtgatga aggggacatt ggcttctccg gctgtggcct tagctagcag
                                                                    1980
cgtcttccca gtgcctggag gaccagtgag aatggcaccc tttgggattt ttgctcctag
                                                                    2040
gtcttgatac tgctttgggt ttttcaagaa attcacaaat tccatgatct ctagcttggc
                                                                    2100
ctcctcacag ccagccacat ctttgaactt cacatcaatt tcatccttta agaccttggc
                                                                    2160
agtggtttct ccgacactga agagtccgcc catccctcgg cctqtccgqc caatqqcaqc
                                                                    2220
aggccctctt ctgatggtgt agagcaagaa ggcgatgatg agcaccgtag gcagcatgct
                                                                    2280
cagcagaaaa gagccatcac tttcagcaat gtagacaaca ggcacccgat tttctccttc
                                                                    2340
tatgcccaat tcctgctgta aagtttccag attccgttca aaggtgtcca cactgccaat
                                                                    2400
attaaaccaa acgtattgcc catcaacagg agtttttcct ggtgtaaagg tcactcgaac
                                                                    2460
aaaacgettg ttgacgaett ceaatetgte tactaeteet tttgaaagat agttattgae
                                                                    2520
aaagteette caagtgattt eteteeegga tetettgage ageaagtaaa acatgactee
                                                                    2580
accccagaac agagcagtcc agaggaagaa catcctgaaa tccttgtcgt cccatggaat
                                                                    2640
gtcaccette tgaaacctgg accaccagtg agaatcatet ttettgecae eteqttttee
                                                                    2700
accgccacca cctcctcctc cagaagagcg tgtggtagca gctggctttg attctttttt
                                                                    2760
ctctcccata acttctttag gttcactagc tttttttcca ttttttccat taggaaagta
                                                                    2820
                                                                    2880
ttttccaaat ccttttgggg gtcgagaaca gaatctttga taagcagcaa ttatatctgt
caaaagagaa tttctgctgg cccttgcttg agttgtaaca aatcggtaaa gcgtccggag
                                                                    2940
gcagggctgc tcgcccgggc ccacgccgcc aggcacgagg agctgctgta ggccqcgqqq
                                                                     3000
ccagcagccg ccccggcccc acagccgcaa acagcggtgc gccatggccg ccgccgtggc
                                                                    3060
cctctcggcc cgggacgctg cgcaggcgcg ggcaggcgac gactggcggc ctcgqgaaqc
                                                                    3120
gggctcggct cggggaaaqq ccqccaqqca qcqaaqcqcq ccqqcqctc acqqaqqaqc
                                                                     3180
ccaagetete aacgeggegt eteceetegt gee
                                                                     3213
```

```
<210> 5683
<211> 2896
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (390)...(995)
<223> similar to gi4262296 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5683 ccatatatgg taccttctcc cggatgggaa catacaaagg ggaaacaact gcctgaggtg 60 ggaaggtgac agtactacct tcttctagaa aacaaagatt gttcaaccac caccatgaga 120 acaggtggaa aatatctcta tagacccaac ctggcaatga agtataaaca tcgcaccccg 180 cagggettet cttggtgece tagttgggtt catttttgtt tgtgactatg aatgggaaga 240 agtcacaccc tgtaaccact ccaactccct aaggagtcac ctcttcttta aggaatagct 300 ttcccttgta tctaaaaaac ttggaactga catgaatgaa cgttggccac tcttacccct 360 ccaggggtca caatctataa cgcctaggac ccaagaatat cagaaataag taagcaataa 420 aactaattct ggcaggaatc agggtggcaa taggactagc agcaccctgg ggtggctttg 480 cctaccatga gttaacgcta aagaacttgg ctcaaatcct agaatcctta gccaccaacg 540 gagatcaggc attaaagaga attcaagagt tccccagact ctggaaaatg tagttgttga 600 taacagacta gcattggatt atttactagc tgaacaaggt ggggtcttgt gcagttatta 660 ataaaacctg ctgcacatat attaactctg gacaggttga ggttaacatt caaaagatct 720 atgagcaagc tacctagtta catagatata accagggcac tgcccccaac tatatctggt 780 caaccatcaa aagtgccttc ccaagtctca cctqtttttc acctcttcta qqacctttqa 840 caactgtctt gttacaaatg tttggtcctt gcttctttaa cctcttagta aagtttgtgt 900 attotagatt accacagtto cagagacaat gotggcacaa ggottocago coatcotgto 960 cactgacacg gagaatgaaa tcgtcctgcc tctqqqctcc ttaqatcaqq tatccaqaqa 1020 tttttactcc tccaqtqcca qqcaqqqcct acqtccataa actcaqcaqq aaqtaqttac 1080 qqaaaacaqa tctccqccct tctqcaqccc ccttaaqatt aaggaggagt atctaatctc 1140 tgaaggggga atgaggtagg aggtgggact caactctgga agtggggctc aggcactcag 1200 accaaactga gcactagcta aaataggtcc agggcagatg ctagtttcca taggacacac 1260 cgacctgtgt caagtcagtt caccatgggc tcctgggcag cacccaggaa gttaccaccc 1320 tcaccctggg aaatgtcttg cataaactgc cccttcaatt tgcatataat taaaagtgga 1380 tacaaatacc actgcagaac tgcctctgag ctgctactgt gggcgcacag cctgtagggc 1440 agccctgctt tgcaaggagc agcgcctctg ctgcctgctg tgcacagccg gccgcttcaa 1500 taaaagttgc taacaccact ggcttgcctt gagttccttc ctgggcaaag ctaagaaccc 1560 tcccgggcta tgcttcaatc ttagggctcg cgtgtcctgc atcactggga tcatctccca 1620 gtaaactagc cacacttaca tccatgtgtc agggacattt ctggagaaag cagcccagga 1680 1740 caccctcage ttgattetee tttttaattg cetgtaagea gggaageaca atgtttteae 1800 attetttgta aggeetttgt tetaetaaaa tetaacetea gageacaatt ttaaactaga 1860 tgaaagagtt gctqcqcctq aaqcactqca aacacctcct caccacacat qtqcactcac 1920 cctggacacc ctcactcacc ctgacaccct cactcctcac cctggactcc ctcactcacc 1980 ccagacaccg tcactcctca ccctggacac ctcactctqc accctggaca ccctcactca 2040 ccctggacac gttcactcac cctgacaccc tcactcaccc tggacaccct cactcaccct 2100 ggataccete actecteace etggacacce teacteace tggataccet cactecteac 2160 cctggacact ctcactcacc ctgacaccct caatcctcac cctggactcc ctcactcctc 2220 accordgact contractor transcription carcotratt cotratrotty garaccotra 2280 ctcctcaccc tggacaccct cactcctcac cctgacaccc tcactcctca ccctggcacc 2340 ctcagtcacc ctgacaccct cactcctcac cctgacaccc tcaagtcttc acctccctgg 2400 gtgcagcctg ggacacgctt tccctaactt ctgaaqqctc aqtcctcctc aaqccaatct 2460 catctcaaat tgcaccctcc ctcagagagg tcttccataa ccgcccttat aaagcaggat 2520 tettteacea atacecette ceacatggea etgteteaca geacteetet aaaagtetgt 2580 ttacttcctt gacaatctgt cttccttata aggggaggtt ctgtaaaagc caagactctc 2640 tctgtctagt tgactgttgc ataccagggc ttagaccaag gccctgacat gcagtaggtg 2700 cttaatatgt tttgaggcaa ggtcttgctc tgttgcacat gctggagtgc agtggcacaa 2760 tegtaattea ttgeageett gaacteetga geteaagtga teeteetgee teageeteet 2820 gagtagctgg gactacaggc atgcaccacc aagcttggct aatttaaaaa aaaaattata 2880 tagataggga cttgct 2896

<210> 5684 <211> 3328

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3019)...(1805)
<223> similar to gi4098299 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5684 tttttttttt ttgagatttt caaaatattt ttatatagaa attttttaca aagattttac 60 aacatagcaa atcattatgt catactgtag aaagatgaag caaaggatta aactccaagg 120 ataaagaaag tgctcatagc aacgtattgc agtctccatg aaagtgcata taaacggtta 180 aggcaaagta ccatcttggt acagacatgt tgcaaactga cttttaaaac aattttttaa 240 aatatataca aacttttttt cttctattct tctcaaaggc atttgaaagg gatactttta 300 tgaatattct tgctgtagaa caatgtagaa ataacttctq qqtataaaac agtaaaaata 360 aaaatattct acctgagtgt gttaaatcaa gtgatttgta aaacaaaacc ttcacaaqtg 420 tgggctttct acatgtaact tgccaggctg aaggcttaca ccctcatgtt ctacaacaca 480 gatcactaat gatgataaca tgagttaaat tgggattctt gcccttctgt gtggcttttg 540 gcttctaggt tctatgacca aactattgac atatttgaag tctgtatgca gtcattgtgt 600 gataaatcta ctttacagct ttgcttctac ctgcagctta catgataacc atgctgtgaa 660 gtgctacata tgcttcatac aatatgttgc cccatctgat aataaaaata caaaqqtqct 720 ctttaagcta aaccataaac cttattagag aattctagtt aagtgttttg tttttccaca 780 tacatgtaaa taccttaaga tcaataggat caataaggat aatattagtt atcaaaattt 840 aqtcttcata cttgaagaat ttgtttttaa aaataactaa gatgcaaaaa aataaattag 900 ctagtcttga acaagagtga gttttgcaga aaactgacat atctgaattc tagtacagat 960 aagaatctgt caaatgataa ctgaattcac gtgactaacc actcttttac gtaaqattgt 1020 atctactcat gagaaatagg ggaattcagt gttatcatta tagtctccgt atttaaactg 1080 agtttttctt ttccaatttt ttttccatgc ctcaacataa gggaaattaa tcagttaatt 1140 tetgctgact taggtttcct aaacagcttt tagttctcaa ggcacagctg tggtaaaaac 1200 agagcaaaac acccagccat ttattggaat tctgcagtac aaaataagca catgtgctct 1260 atataatcta gtaacaggat agcaacagtt aaactgtctc aaacaacaga tgtatttgct 1320 tgattttcct tcctaacttc ttttgcatca ggaccgcaag caaagagctt gtttcccaga 1380 gtattttggg caaatcggaa atacataatg tggcccattg ccacaaagga gactgaaatc 1440 aatacgagca agccaaaagc ttcaggattt ggagccagga tgaccatgat gaaatgcaga 1500 agatcaagaa gatagttcat ggagttctgt acaccattta taatqcctct ttcagattca 1560 attacatttt cttgcagcaa ctgtgtcaca gttaaatcaa aggaccaaag accgattcta 1620 gcagcaatga cgcctgcaaa cagcagactg acagagatta tgggcacaga ttcaggactt 1680 gtctccggga caatattagc agaattagac ccattagaca tgtatatttc agttgtaatt 1740 tcaggtatct tggtaggtgt aattgactct ccttgaatga accttgatcg gatatcttca 1800 aaaggagaaa cggacaagtc cagggggctt ccaggcatga atacagagat cacacacaag 1860 atcaaacagg aaagctgtgc caatcctgag atcagacctg tccgaaccaa accacatttt 1920 cgacgtagcc aagtaaaagc tacagttccc attattccag ttatagctga tgctcccatc 1980 aaaatactga ggatggaacc actcagtccc tgagtgtagg cgtaccctgt ggtgatgcag 2040 tcaaagccca qqacagtcat ataaaggaaa gcaagaccca tgccagccag aaacacaggc 2100 tggttgtagt aggagaccca tccatctcgg aaggtacgga agggctcagc catctgggag 2160 gcacaagtag gctcttgctc atgttcaagc tcatggatgt tagagtcttt cacacccatt 2220 agatgagttc cctccagggg ttttggctca gtatctttgt gtaaattcag ctgtttcaat 2280 tcagtttcct cttctttaag accagctttc acagctagag ctggggtttt ctggtaaacc 2340 ttccagagca ggacgtactc cacgcacatg gataccaagt tccatcccga aataaagcca 2400 cagccgatga ctggggagcc aaatgtcata atctggccaa cagccatggg ggctaagatg 2460 ttggttaact ggtcaatcct tcgtattgtg gcattcatat ttgctagttt gcttctgtct 2520 tctcctqcaa caacaacaat ccaatccctt tggattgtga ttgcagtagc agtactggcc 2580 aaatttgcaa tatttgcaat agtgatgatc aggatatagc aggaagtgag aacccatcca 2640

```
tggtacatgg tcagaagctc atgtttatgt aagaaaacca tcatcaggat gattccacac
                                                                     2700
aggatgactg aaacattctg taccaccagc gaggtctggg ccactttaag tctagcattc
                                                                     2760
ttgtccaccc agtcaccgat gatggctccc aggaccagaa cagaccctgc caccaccagc
                                                                     2820
ccgtagactg ctgtcaaaag gaggctgttt ccatagagct ctaccagaaa cacaqacacc
                                                                     2880
gcaaagtgcc acatccgatc tccccaagta gagagagaat gaccaaggta gagaaggaat
                                                                     2940
tttgcagagg tcaggtagtc ggccaaggat ccacagcatc ctctctggcg gttgtgatct
                                                                     3000
cccgccctgg tcatgacact aggcgacccc gctggctctt ctgcggctgc tatcgctgct
                                                                     3060
gctgctctcg ctgaggtgct tgttaacagg agtgcaagga actggagata gcacctctaa
                                                                     3120
aaacacaaca gccttgggca aaaagactac aacgacgact ttggcaaaga acaaaagaaa
                                                                     3180
aggggcccag ggattttctt ttttccttct ttccaaactt agctaacact gtagctgaag
                                                                     3240
ttggaaaggc aaagcettat ggaageggtt tgggaggete ageaggtegt eegageetag
                                                                     3300
cggacgccct gagccagctc ctcgtgcc
                                                                     3328
```

```
<210> 5685
<211> 1727
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1728)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1363)...(1553)
<223> similar to gi1770466 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5685 cgagcgcgga acgcgagggg ctgctggggt gtttgtcgca gcgggttttc ctcqqcqqtt 60 tgcggagctg ctaggatgga gcaggttgcg gagggagcaa gggtgaccgc agtccctgtg 120 tcagctgccg acagcactga ggagttggcc gaagtcgaag aaggagttgg agtagtgggc 180 gaagataatg acgcagccgc gagaggagcg gaggcctttg gcgacagtga ggaggacgga 240 gaggatgtgt tcgaggtgga gaagatcctg gacatgaaga ccgagggggg taaagttctt 300 tacaaagttc gctggaaagg ctatacatcg gatgatgata cctgggagcc cgagattcac 360 ctggaggact gtaaagaagt gcttcttgaa tttaggaaga aaattgcaga gaacaaagcc 420 aaagcagtca ggaaggatat tcagagacta tccttaaata acgacatatt tgaggcgaac 480 tctgatagcg atcagcaaag tgagacaaaa gaagatactt ccccaaagaa gaaaaagaaa 540 aaattgaggc agagagaaga gaaaagccca gatgatctga aaaagaaaaa agcaaaggcc 600 gggaagctaa aagacaagtc caaaccagac ctggagagct ccttggaaag tttagttttt 660 gatttaagga caaagaaaag aatttctgaa gccaaagaag aactaaagga gtccaaaaag 720 cccaaaaaag atgaagtaaa agaaacaaaa gaattaaaga aagttaaaaa gggtgaaata 780 agagatttaa agacgaaaac aagagaagat cccaaagaaa atagaaaaac aaaaaaagaa 840 aaatttgtcg aatcccaggt ggaatctgaa tcaagtgtac ttaatgattc tccctttcca 900 gaggatgaca gtgaagggct acattccgac agcagagaag agaaacaaaa cactaaaagt 960 gcaagagaga gagcagggca ggacatgggg ctgqaqcatg gctttqaqaa gcccctagac 1020 agtgccatga gtgctgagga ggataccgat gtcagaggca ggaggaaaaa gaagacccg 1080 agaaaggctg aggacactag agagaacagg aagctagaga acaagaacgc tttcttagag 1140 aagaaaactg tgcctaaaaa gcagaggaat caagacagaa gcaaaagtgc tgcagagtta 1200

<400> 5686

```
gagaagctga tgcctgtatc tgcccaaacg ccaaagggcc ggaggttgag cggggaagag
                                                             1260
agaggcctct ggtccacgga ctcagccgag gaggacaaag aaaccaaaag aaatgaatcc
                                                             1320
aaaaagccca aaaaagatga agtaaaagaa acaaaagaat taaagaaagt taaaaagggt
                                                             1380
gaaataagag atttaaagac gaaaacaaga gaagatccca aagaaaatag aaaaacaaaa
                                                             1440
aaagaaaaat ttgtcgaatc ccaggtggaa tctgaatcaa gtgtacttaa tgattctccc
                                                             1500
tttccagagg atgacagtga agggctacat tccgacagca qaqaqaaqaq aaaagcccag
                                                             1560
atgatetgaa aaagaaaaaa geaaaggeeg qqaaqetaaa aqacaagtee aaaccagace
                                                             1620
1680
ccaaagaaga actaaaggag tccaaaaagc ccaaaanaaa aaaaaaa
                                                             1727
```

```
<210> 5686
<211> 818
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (337)...(279)
<223> similar to gi4691243 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
aagaccacat ttccctcatc cctgtgtccc ttgcggcagt tgcctgaggt cagagggtac
                                                                       60
agtggtcaac ctctgactga ccctctcatc tctctttgca gatctcataa gtgcagggga
                                                                      120
aaggggtggg gcagcagctc ctatccttcc ctcccagccc tactccgggc ccqqtcaqct
                                                                      180
cctggccact gtactcaccg aagctgtggc ccagaatgga gaatcgattc catttcaagg
                                                                      240
ctqqaaatqc aaqqaqccag aaqqtccqqc tqqqcacagg ctcagcccac gatcttgctt
                                                                      300
ctagtcccca ggctcaggaa atcccttccc agcatctggg gtgtccaccc aggagactag
                                                                      360
cttgggggac ccactggagg aagcgaactc ttcaactttc ccaagatctc ccgtgaattg
                                                                      420
ctggcagacc tggggccaga gcccaggccc cactetcagg ccagcgctqc ttcctqqatc
                                                                      480
ctaccccgcc tccagtgata agagggggtg ccctagagca cccccacac cgccgaaaat
                                                                      540
acacactetg tttettacet gecacaacte tteggatete acteacaaaa gtetggaggt
                                                                      600
aatatgggac acctgggctg taatgggacg agagcccatg acctccgaaa tccatggcaa
                                                                      660
cgtaataaaa gtctgattca gtgaataaaa cctaatgcct cccggaaata aaaaaataat
                                                                      720
actgcctaaa cctcccgggc cgcttgttat aaaggggccc atcaacaccc ccaaataacc
                                                                      780
tttgtttgtc tattatagat cccaaccttt tatgtttg
                                                                      818
```

```
<210> 5687
<211> 1836
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1786)...(0)
<223> similar to gi1006659 in the genepept database release 114,
```

```
<400> 5687
ttttttttt ttgaaggaaa ggaactttca atgagaaatc aaaacacagg ggaaccaaag
                                                                       60
tgcaaatcat ccaccccca tgggggggcc aatcctgaac cccacatcat cccctcagcc
                                                                     120
cccttcaggc ccccagcgca ggcccagggc tcggatgctt ctgcctcagg tagctcttga
                                                                     180
gctgggggca ggccctctct gggacctcca gtttcttaga aaggtagacg gcagggagct
                                                                     240
tgaagcccat tcagggccta gggtgccgtt ccctcagggg cccttcgagc ccagtcaggc
                                                                     300
accogggecg teceggeagt aaatgeceag cegtteeege aacaccagea ceaccetetg
                                                                     360
ggcaagggtc tcgagtagtg gcgctagagg cagcctgggc cctqtqqqca qqacccttqq
                                                                     420
tgggtatggc aggaaggggt cctgggtcct cacgggaagc acagcaccag agctgctggc
                                                                      480
gcacagcagg aagtctgtgc agtagcctgg aggcacagtc aggtcctggc ggtatttctc
                                                                     540
ctccccagc agctggcgca acccctcagc tactatgtcc ttgtgactgt acttgcagcg
                                                                     600
ggcacggtcg gtgatgagag gctggggaaa gatgggcact tgctgccttc ggggaaggcg
                                                                     660
gggacccgg tatcctggga gctccagctc cacqqccqtq tccaqcaqqq aqaqqtagcq
                                                                     720
acgcacaatc agagcatgag gggtgccact gatgtagttg atgaagccag gggaaaaaac
                                                                     780
aaagtgcagg gctctgaagg gcaggcaccg cagttggcac agtgacatca agatgttgac
                                                                     840
tgtagccagg ggtgccaccc ctgcttcccg agccaggatc ctctcaaggc agggcataaa
                                                                     900
ctgctgttcc aggggcaggt agttcagtcg cccaaagggc aggaccaact tctgtaccac
                                                                     960
cttgctgctg agttgcgttt cctgaaccac caggaagtgg gcaatggctt ccagaagctg
                                                                    1020
gggctcccgc aaccggtgcc gggccaggtg ctgggccagg agcaccatca cgtggggagt
                                                                    1080
cagtteetet ggeettgeet etgeeagget getgateaga tgetgeegtg gatacegeag
                                                                    1140
aaaacggggg cagcttagag cagcttccaa cccttgccca cctcggagaa ggggctgcaa
                                                                    1200
agggggaggt ggcttcggag ggaggcggag ccttcgctcc tgttccaggg cacacaccag
                                                                    1260
gggaccatca gatggaaagc caagtaagac tgcaaggtgc agacacacgt ggatggtgtg
                                                                    1320
aatgtcaaag gaggggcagt ttcggatgat gagctgactc aagtcctgca gtgtgacctg
                                                                    1380
ctccacagga gggggccgtg gccgagaccc caagagctgg cccagacgac gaagcgccac
                                                                    1440
cgagtagtgg tgggcgcgca ccttgctggg gttctggccc agccagcgca gcagctcccc
                                                                    1500
agggetette geetgtteea gaageegetg eagteettge acaggaeetg caetggggee
                                                                    1560
tectecaaca ggeeggteee eccatttget gggeeceaaa cageaggget gtactggagg
                                                                    1620
gatcagcagc aggccagaca qccgagcagg ggagqtctga qcaqaqaqca qqactcqaaq
                                                                    1680
catggagttq ggtgatggag accatgactc cccgggccct gcgcaggtcg ctccctcagt
                                                                    1740
cggtctcggg gcccgggggc cgggttcccc ccgcggcctc ctcatcggct agccaccgag
                                                                    1800
tccgccatct tccccctcgt gccgaattcg aatcga
                                                                    1836
```

```
<210> 5688
<211> 1450
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (667)...(1239)
<223> similar to gi4826524 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5688

```
ccactctgct cagetccgct ccaggaaggc cacetectce teccectect ecteecgetg
                                                                       60
tcaccactca ccgctcataa cctcaagggg gtggggaccc cagggctgga cacaccccac
                                                                      120
cgtggcccca gagctcagcc ggtcgcacgg acggacagtt ggaaqccqqa ccccaqaqcc
                                                                      180
tgaggtgggc agtgtgccag ggtcccttgc ggcctcctca agccctgtcc aggctatggg
                                                                      240
catcaagaca gcattgccgg cggctgagct gggcctctac tctctqqtqc tqaqtqqqqc
                                                                      300
cctggcctat gctggccggg gcctccttga ggcttcacaa gatggggccc acaggaaggc
                                                                      360
cttccgggag tctgtgcgac ctggctggga gtacattggc cggaagatgg atgtggctga
                                                                      420
cttcgagtgg gtgatgtggt tcacctcctt tcgcaacgtc atcatctttg ccctctccqq
                                                                      480
acatgtgctg tttgctaaac tctgcacgat ggttgcccca aagctccgct cctggatgta
                                                                      540
tgctgtgtac ggggccttgg ctgtgatggg cacaatgggc ccttggtacc tqctqctgct
                                                                      600
gcttggtcac tgtgtgggcc tctatgtggc ctcgcttttg ggccagccct ggctctgtct
                                                                      660
tggccttggc ttggccagcc tggcctcctt caagatggac cccctaatct cttggcagag
                                                                      720
cgggtttgta acaggcactt ttgatcttca agaggtgctg tttcatgggg gcagcagctt
                                                                      780
cacagtgctg cgttgcacca gctttgcact ggagagctgt gcccaccctg accgccacta
                                                                      840
ctccttagct gacctgctca agtacaactt ctacctgccc ttcttcttct tcgggcccat
                                                                      900
catgacettt gategettee atgeteaggt gageeaggtg gageeagtga gaeqeqaggg
                                                                      960
tgagctgtgg cacatccgag cccaggcagg cctaagcgtg gtggccatca tggccgtcga
                                                                     1020
catcttcttt cacttcttct acatcctcac tatccccagc gacctcaagt tcgccaaccg
                                                                     1080
cctcccagac agtgccctcg ctggcctagc ctattcaaac ctggtgtatg actgggtgaa
                                                                     1140
ggcggccgtc ctctttggtg ttgtcaacac tgtggcatgc ctcgaccacc tggacccacc
                                                                     1200
ccagcetece aagtgeatea eegeacteta egtetttgeg gaaaegeact ttgacegtgg
                                                                     1260
catcaacgac tggctttgca agtgagtagg agtgggtgg gggtggtcac agccatcttg
                                                                     1320
ccaggtgtct gagcagggca gtgccaaqat gggtccacat tttaaaagat caccctggg
                                                                     1380
ccaggggaag caaagagggc agtgaggagg tatttgcaga gggtctggtg aaagatatag
                                                                     1440
aagttaggac
                                                                     1450
     <210> 5689
     <211> 1883
     <212> DNA
```

```
<210> 3669
<211> 1883
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1884)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1113)...(971)
<223> similar to gi4335756 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5689
actcaccaac cctcccttc caaccagaga aactcactgc agtatctcct tgaaagtctg 60
gtgacgtgtc tgtctaagtg ctggtgagag gcacaggacc aactgagggc ctcacgcagt 120
acccctggcc acagggtgcc cgcctaagcc cacacctgct gactgcaaca agcccatggc 180
caggacggaa cacagagaag ggtctgaggc ctggagcgg ccatgaaggc catggggcaa 240
gtgaggtctg ctgagatagc gcaggtctgc ggagctgaag tgcagctgca gaggctggtc 300
tggtgctgcg agaactggaa gaagctggga gctgtggtcc ctgtccacag agatgctgga 360
aactgtggct gggagtggct ctgaggccgt ggagagagag catctctgcc ccacggcatc 420
```

```
tgcgggtgag ggcaaggtcc tcaccagaca agtgcagctc caagtcccag atgttgggct
                                                                      480
ttttcttggt actgagacag cagtggggca gggtggggca gtggcaqqaa gqcaqqqaqc
                                                                      540
ctctcttgct acctcttctc catgctctgc atctgcagac tgagggaggt gaagctggcc
                                                                      600
aggaggtcag tcacttcatc cacctgctct ttggtactgg tcatctgcag gcgggtgcag
                                                                      660
aggicatica ggogitotog otgotoatgit tgocotaggic gotocagata otcootcago
                                                                      720
atatggatga tetgetteae etceagaege acageettta ggeaetggge atggeetee
                                                                      780
tgcaggatat tcagctttga cttggccagg tgcaggggtg tgcgaccagc tcggtccagg
                                                                      840
qcatctacac gggcccctcc tcgtagcagt gtggtgatga caggaacgtg gttggtgcag
                                                                      900
gccgccaggt gcagtggcgt gttccccagc ccatctcgct ggttaggatc agcaccatgg
                                                                      960
tccaggagca gctgcacaat ctggtcattg ccattgcatg aggcaaagtg tagagctqtq
                                                                     1020
cggcccttgt catcagctgc acagggatcc gcgccatctt ccagcagctg ctgcactgtt
                                                                     1080
tccacatcat tggcattggc cgagtccctc agtctcttca gagcgtgcac ctccttgccc
                                                                     1140
gtgggaggat gcatttcctg gctctgaggt ggcctggact ctgtggcttg agctgcctc
                                                                     1200
ctcaactcca gtttcctgct ccatcgctac acctccaacc tcctctcccg tcacctgctc
                                                                     1260
ttctgttata cagacccggg tgaggacatc aagccctcct gaacaagctg ggataatctt
                                                                     1320
cctggcgaaa gatccttaac ttcattacat ctgcaaagcc cctttgggcc atacaaggta
                                                                     1380
attttgacag gttcctggga ttaggacatg ggcatcttgg gaggccacta ctggcctacc
                                                                     1440
acaactgggg gnagcaaaac taattacacc ctccggtata atagtttttg gtgtttcaat
                                                                     1500
gactgggagg aaaaggggtt ggaatttttt ttqctttqqq qqtccctctt aaccttqtat
                                                                     1560
ttttaaggtc tgggactcac caaccccttc cccttccaac cagagaaaac tcactgcagt
                                                                     1620
atctccttga aagtctggtg acgtgtctgt ctaagtgctg gtgagaggca caggaccaac
                                                                     1680
tgagggcctc acgcagtacc cctgggagtg gcttcttgag gccgtggaga gagagcatct
                                                                     1740
ctccccacgg catctgcggg tgagggcaag gtcctcacca gacaagtgca gctccaagtc
                                                                     1800
ccagatgttg ggctttttct tggtactgag acagcagtgg ggcaggacgg aacacagaga
                                                                     1860
agggtctgag gcctggagcg cgc
                                                                     1883
    <210> 5690
     <211> 1633
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (591)...(1277)
    <223> similar to gi3874290 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5690
ggataaacat ctgtagcacg cttacgccaa gcttggcacg aggggagatt gacgcggcag
                                                                       60
tgcacacctg ctggtacgag caaaagtagc cgacaggcca gagtttccag tttcggtggc
                                                                      120
ttcgtaggct tttagcttct gaaatccgct aaaagcggcg gttcattcat cttcaagtac
                                                                      180
ctagcctgac tggtagggct gctcagcatt ccgaaacatt tcgacctggg gaggggggg
                                                                     240
gcggtgaaag aatactttct gtagagagtg cccctcgcgt cgcccctgct ttgaaggctt
                                                                      300
tatgtattaa cggaatgccg aacatttgtg tcctacttgc tgacagcgca caggatcctt
                                                                      360
```

420

480

540

600

660

720

ctaacagtat ttctcaagta cttaacaaaa agatgaaaac ttgaagtcca agccgtgctg

ctgattccgt ctcacagttt aaagactgtc cagaaacttt aagctttcaa aactgtacat

tttaaaatcc tgtgcgttta tcttcatttt gctgggcaga aagccaaagt actggactgc

ctggttcagg gctgaacgcc tagtacacct gctaacttgg agcttcagag ccatggcaac

caaggagtca agagacgcca aagcacagtt ggccctctcc tcatcggcca atcagagcaa

ggaagtgcct gaaaacccaa actatgctct caaatgtact cttqtqqqac acacqqaagc

```
agtgtcatca gttaagttta gtcctaatgg agaatggcta gcaagttctt ctgctgatag
                                                                      780
gctaatcata atttggggag catatgatgg aaaatatgag aaaacactct atggtcataa
                                                                      840
tttggaaata tcggatgttg cctggtcatc agattccagt cgtcttgttt ctgcctcaga
                                                                      900
tgataaaact ctaaaattat gggatgtgag atctggaaaa tgtttgaaaa cactgaaggg
                                                                      960
gcacagtaat tatgtctttc gttgtaactt caatagcatg tatattttac acactttcat
                                                                     1020
gaccattaat catctcctaa aactggggaa agctctctaa aacctcttaa gagtaacctt
                                                                     1080
atccgttacc ctattccacc aacctctttg tccttttctg tttcaagcaa ctttgagata
                                                                     1140
ccgacttctc tatggaagct taagccgtag atgctaaaac aaacgtttgc tcgttactcc
                                                                     1200
cagcagagca ccggctttta aaggacctca acagacacgt ttcttaacct ttacgaaact
                                                                     1260
tttccagggg aaacttaaac caggaatttt acaatctggc ataaattctg tcacccgccc
                                                                     1320
cgtgactcca tcgccacaca tgccacctgg ctccacacca caacaaacag gagggagcgg
                                                                     1380
aacccatgca aagcaggagc ttcccccgtt tccggcgtct gggtggatct acgttagctg
                                                                     1440
ccgtttaggc agcttacgcg tcaggtgtgg gcctacgcct gcagctaagg taggcatccg
                                                                     1500
caaatctagt ccttctctgt gacaatttcc aaaaagaaat ggtttttgaa acaacgatcc
                                                                     1560
actgcttccc acactatcca gttaggtccg ggacagaccc tacccagcta atgcactcac
                                                                     1620
ccaagaaggc agt
                                                                     1633
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (649)...(776)
     <223> similar to gi9453 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5691
ggcctctccg gaagcctgtg gcattcctgg cacctccaag ccatctgctc ttcagcctct
                                                                       60
gggcccagga ctagactagt gctaaaatag ctgctcctgg gaggggctgg acccccaccg
                                                                      120
tgggcagaga gggcctctgc tttttggggc aggagggcc accctggcag ggtaaaaaga
                                                                      180
gataaacaga aaaacaacag caacaataat agtaacaatc cggggttgtt gccatggggc
                                                                      240
ctgttctgaa caggctgcgc ccagctcact gcgaggaagg acgcttagcc aggccctggc
                                                                      300
tgaagcctgc agctgggctg gacacagcag tcattggcct gtgttgtggg ggacttgggc
                                                                      360
ctgccatggc tgcagtgggg accetgcctg agacagacag agctggggtg gtgaccaaca
                                                                      420
ccqtcqgqgc accctcqcaq gaactqgqcc tggtgaactq cccaqgqacq gggaaggagc
                                                                      480
agggtgaggc atggggaccc cgacacaggt tgagcagcgg gagaggaggc tgaggaggg
                                                                      540
aaggagggg cccgcagagt agcccccaga ccccaagtcc ggtcagggac aagcttgtta
                                                                      600
gctccaggtt catgtcacaa cctgcagggc tcctaagttc aagctttttt aaacttaatg
                                                                      660
ggcaaactga gacgcaacac aaataggctt ctgaccttgg tgtctgagtc ctggatctga
                                                                      720
agtccttcac ggcactcact gtgagcccct cttagacgca ctgcacgaag tgagcttgcc
                                                                      780
agctcttcct ttaagaaacg tgttaggccg ggcgcggtgg g
                                                                      821
```

<210> 5692 <211> 2245

<210> 5691

<211> 821

```
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (182)...(1677)

<223> similar to gi3881161 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5692
aacttccqtq tcgacgatcc cgcggggctt ggcctctgcc cggccacaga gccggagctg
                                                                       60
gaggtgetgt cccgtctggc ggcgatcccc gggcagggcc cggggccggg gtttgaagat
                                                                      120
gctgaacgtc ccttcccagt ctttcccggc ccccaggtcg cagcagcgtg tcgcctccgg
                                                                      180
ggggcgtagc aaggtacctt taaaacaggg cagaagcctt atggattgga ttcgactgac
                                                                      240
caaaagtgga aaggatctaa cgggattaaa aggcaggtta attgaagtaa ctgaagaaga
                                                                      300
acttaagaaa cacaacaaaa aagatgattg ttggatatgc ataagaggtt tcgtttataa
                                                                      360
tgtcagccct tatatggagt atcatcctgg tggagaagat gaactaatga gagcagcagg
                                                                      420
atcagatggt actgaacttt ttgatcaggt tcatcgttgg gtcaattatg aatccatgct
                                                                      480
gaaagaatgc ctggttggca gaatggccat taaacctgct gttctgaaag actatcgtga
                                                                      540
ggaggaaaag aaagtottaa atggcatgot toocaagago caagtgacag atacacttgo
                                                                      600
caaagaaggt cctagttatc caagctatga ttggttccaa acagactctt tagtcaccat
                                                                      660
tggcatatat actaaacaga aggatatcaa tttagactca ataatagttg atcatcagaa
                                                                      720
tgattccttt acagcagaaa caattattaa ggattgctta tatcttatac atattgggct
                                                                      780
aagccatgag gttcaggaag atttttctgt gcgggttgtt gagagtgtgg gaaaaataga
                                                                      840
gattgttcta caaaaaaaa agaatacttc ttgggacttt cttggccatc ccctgaagaa
                                                                      900
tcataattca cttattccaa ggaaagatac aggtttgtac tacagaaagt gccagttaat
                                                                      960
ttccaaggaa gatgttactc atgatacgag gcttttctgt ttgatgctgc caccaagcac
                                                                     1020
tcatcttcaa gtgcccattg ggcaacatgt ttacctcaag ctacctatta caggtacaga
                                                                     1080
aatagtaaag ccatatacac ctgtatctgg ttccttactc tcagagttca aggaaccagt
                                                                     1140
tcttcccaac aataaataca tctacttttt gataaaaatc tatcccactg gactcttcac
                                                                     1200
accagagett gategtette agattggaga ttttgtttet gtaageagte etgagggeaa
                                                                     1260
ttttaaaata tccaagttcc aagaattaga agatctcttt ttgttggcag ctggaacagg
                                                                     1320
cttcacacca atggttaaaa tactgaatta tgctttgact gatataccca gtctcaggaa
                                                                     1380
agtgaagctg atgttcttca ataaaacaga agatgatata atttggagaa gccaattgga
                                                                     1440
gaaattagca tttaaagata aaagactgga tgttgaattt gttctctcag cacctatttc
                                                                     1500
tgaatggaat ggcaaacagg gacatatttc accagctctt ctttctqaat ttttqaaaag
                                                                     1560
aaatttggac aaatccaaag ttctcgtctg catttgtgga ccagtgccat ttacagaaca
                                                                     1620
aggagtaagg ttgctgcatg atctcaactt ttccaaaaat gagatccata gttttacagc
                                                                     1680
ataatgaaga gctgtcattg tcctttattc aactagttta tctaaatttg tgattgctta
                                                                     1740
gggtttttta agagaacatt tttgtacata acaaaaggtt aactagaatc cagccttcag
                                                                     1800
tttcttaaat gaaatcaaat gttccttcag tacagggtaa cttcttgggc tttcttttgg
                                                                     1860
taccacaact tatttttact actgatattt gacccgggaa agttaatcat ggcaacaaat
                                                                     1920
acatacagga ttctttgtta tgaatcacaa atttccttgc catttaaatt atatcactgt
                                                                     1980
tctacaataa gcacttgtgt tttatgacat gataaagtaa atgatcactt cgatcatgtt
                                                                     2040
tctatgctgt aaaatgtctt attagcaata cagattaaat tttaccttgc actgttaact
                                                                     2100
caggaaatga tcatttatgt ccttgttatt aatgttaaaa catagaatgt tataacttat
                                                                     2160
taagtgatcc aaacattttt ttgtgtgtgt atggcattga tgcagaatag aataaaatta
                                                                     2220
tacttaagtt ctttttaaaa aaaaa
                                                                     2245
```

<210> 5693

```
<211> 630
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(631)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (361)...(110)
     <223> similar to gil345538 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5693
ttttttttt tttcctagag aagagacgaa ggtgattcag ggccgagcag ggctccctgg
                                                                       60
gaagccccct cttcctgccc caactttatt ttggttctag aatcattcca gttggcatac
                                                                      120
ccggtcccca ccacggctgt cctgggcaca cagttaacat gtcatgcagt tagggggagg
                                                                      180
gagagaggg agagggcagg gggggagtca gtggcctgca ccgcacagcc actgggttag
                                                                      240
agaaagtcgg ggtctcccag gctgcaaagc cttgtccagc catgtgtctc ctggccctgg
                                                                      300
gctgacctcc tgctgtggcc atagggtaga cagcctggcc ttggggctgg gccatggctg
                                                                      360
tgtcaggtag ggaaagccac catcctgcct ccagtcccct gggcccttgt tctagcccct
                                                                      420
cctccccca tatcactggg gataatttgt tggcctgggt ctccatagct caccagttat
                                                                      480
ggaccaagga acaggggcag ccagcctgag ggtccatgct gtcacctgtg ggtggccca
                                                                      540
ccgagcagat gatcggacgc ctttcgaccg gnattccnnc cngncgncnt cgaggatctc
                                                                      600
agggctcagg nnnncggccc ccqttccccc
                                                                      630
     <210> 5694
     <211> 2069
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (325)...(1347)
     <223> similar to gi4104615 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5694
caaggagcac aggtcctcgt tcaggacgat gtaatccttg ccatcgtaag caagctggtg
                                                                       60
atacccgcgg agtaggcgcc cgtccgaccc cacgtcgcag acagacatcc tctagatggg
                                                                      120
tgtgagaccc tggccccgcc cccgcggcca gccccgccca ccgagccccg ccctcgccag
                                                                      180
gaccaacctg cggggatttt ggctgaaaat gaaaccgggt aacggctcct gggcctctcc
                                                                      240
cgggtcaagg gtctccacgg tcccgctgcc tcggcgtgga tctcggaccc agagactcgg
                                                                      300
ggagacccgg gcggtccgtg ggggatgtgg aggggtagtg acctgcgccc ccggccggtg
                                                                      360
tcactcacag gcctcactct ggtttgtaag taagccgctc agggtccgca agtttcactc
                                                                      420
```

```
ggtaaaactg tgctttggcc ttggcggttc cctgtctcct tcttcccaat attccggccc
                                                                      480
ctcctgctcc atccacggcg cccgcggctc catcctggga ctcgtggcgt cgctgtcgaq
                                                                      540
ccgcacgcac tgcgtgtcgt ccacgtcgcc cacggagagg aagcggggat ccgcqcqcc
                                                                      600
gggccgggac atggtggtgt ggaaatacct caaggagtgq aagcctggga qcaaqqaqqq
                                                                      660
ggctgagacc ctcccgaccc tcctcccggc accgcaaccq qqttcctqcq ccccqccqq
                                                                      720
gcaggcccct agctactccc cacagacgcc gtttccctcc cgaccccqca ctcacctqcc
                                                                      780
caggtctggg tcaggaccag ggcccccgag agcagcagaa gcagggttcg gggcgccatg
                                                                      840
acaccatcct cggcgactgg ggagaatcgg agtcccggtg ggtgcgtggg aactttagaa
                                                                      900
ccgggaccgc ggctacattg attggcttct ctaggaaccc gacactcaat gggagtgaga
                                                                      960
actggggcag cctggtgagt atccaggaag aaggacccga cacaggttgg gagagggaga
                                                                     1020
agagaaaccc tgcggagatg gggaatcccc agcgctgggc ctccccaatc catacaccgc
                                                                     1080
ctttggggcc tgagatcctg agagccatgc ctgaggccct gagagccatg cctgaggccc
                                                                     1140
tgggacttcg ccctgacccc gctacttctg tgccaagcgc tctgtctcaa cgtttccgag
                                                                     1200
tcttggccca ggagctgtct gagaaaccag ggagaaaccc tcggaatggg ccccqtccct
                                                                     1260
ctctcttcac tttgcatcac ggaatccccg tcccagaact ggactccctg cctcctactc
                                                                     1320
cttacctgtc cccgtggact cttctagaag aaaaatcacc ccagggagct tqttqccaga
                                                                     1380
qaqtqaqctt qccctgggaa tggaggtgta gagacagggt tttttgttgt tgttgtttgt
                                                                     1440
ttgtttttta aatctggaaa agttgtgcct gagtgcatga gatagaatag agaccagttt
                                                                     1500
gctttttgtt tattaactac agtgggtagc agaatcttgg taactcctaa tgatcaggaa
                                                                     1560
tctaatcggc caaaaatgtg actttggtcc cttgacatat aaatgtgtct aaaagcatta
                                                                     1620
caacaggaat cacaaagctc ctaagtttca ctttcccaga caatgtatct gtgactcccg
                                                                     1680
cttgtagtat tttaaattta ccttcattcc atagccctqq aqtttctqtq tqaqtccaqq
                                                                     1740
acatetecta atacaaggta gecaetgtgt tactatatgt tgtaaccagg agecagtacg
                                                                     1800
gactttattc atctcacagt ggcaagcact caatgcagtc acaatgcccc tcaccagtgc
                                                                     1860
tcatgcactg cctgttttta ggaagtatcc acttctaagt gttgtgtata ttttatatqa
                                                                     1920
acacttagta ttttttaaac ctgattaaca taaaaaaatt agtttttagg cagacccaca
                                                                     1980
taaggtatta aaggccaact gcaaagatca ccctgcaagg ctctgtagat tgatgtatta
                                                                     2040
aaatatataa aacaatgtgt ttaaacctg
                                                                     2069
    <210> 5695
     <211> 1089
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (636)...(932)
     <223> similar to gi1255991 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5695
taattgaaat cgtacagcgt tgcggaattc gcaggattaa tcacataagg agactgtttc
                                                                       60
atgcttgagg taaggagtgc ttagataaag tgagagaaat gggaatagaa agataggcac
                                                                      120
atacattttc caagaaagaa tgatctgaat tgagttattg attgaataca ggatataaag
                                                                      180
aagaaagtaa caaagaggac tgagtttttc aaccatgaca cctggaagga aaaatagcag
                                                                     240
agacagggaa aagagacaga gacaaggaaa aaaaaagaga cagaqacaag aaaaccattt
                                                                     300
agggaataaa gtcttaagtc tggttttgga catattgagc tggagtagat ggcataaaat
                                                                     360
ctatcctcaa ggaaaagtga ctgttcttga acacagggag ccqtcctgat ctqtcatcct
                                                                      420
tcttgaatct gtctagtgct gaaagtactt actactggac cctgttttct ctgagcagta
                                                                      480
```

540

taatatggct tctttactat taatctaaat ttgggctaat tttatatatt tttcaaaagg

```
cattgatttt ttaaagagtt ttttaatcat taattcactc tggtaatata agtaatacct
                                                                      600
ttatatagtc atctaaactt tccaaagcac ttttacctat tattctcaga acagtccagg
                                                                      660
aaagtaggca aaacagacat tatcaccatt ttatgaggta ctggatgcta aatgacttgc
                                                                      720
tcagcgtctc ataactggta agtagcagga tcaggtctga aatccatttc acctggcctt
                                                                      780
agatccatct ttgagggtct ctttatctga taggcttctc gtcttggata ggcaaaggaa
                                                                      840
ggatgaactg gagcagagga tgtcggccct gcaggagagc aggcgggagc tgatggtcca
                                                                      900
gctggaagag ctgatgaagt tgctgaaggt aagagcccgt ggcccacgct cagttcttgt
                                                                      960
cattettete ecaccacage etcagetget geetecagta aatttteatg ecacagagag
                                                                     1020
ttctttcatt ctgctgcttc aggaaactat tatgtacttt atcttctatc cattcctgag
                                                                     1080
acttcctag
                                                                     1089
```

```
<210> 5696
<211> 1596
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1392)...(946)
<223> similar to gi5102729 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5696 ctccggcggc gcgtcccccg agcttggtac ggctcagccc gtctcccccg aagccgcgcg 60 eccgegeeg egeceteag teggtggage eegeageec eettgtggee egeggeaget 120 ccccgcccgc tcggcccgcg cccgccatgg tccgtccgcg ccgtgccccg taccgctccg 180 gcgccggggg cccctcggg ggtcgcgggc gccctccgcg gccctcgtg gtgcgcgccg 240 teegetegeg eteetggeet geeageeeee gaggeeegea geeteegegg gateegggee 300 cgctcggccc ctcccatgga aggtgctcgg gtcttcgggg cactgggtcc catcggtccc 360 tecteacetg ggeteaceet egggggtetg geegtgageg ageacegget eageaacaag 420 ctgctggctt ggagcggcgt cctcgagtgg caggagaagc gcagacccta ctctgactcc 480 actgcaaagc tgaagcggac cctgccctgc caagcctacg tgaaccaagg cgagaacctg 540 gagaccgacc agtggccgca gaagctgatc atgcagctga tccctcagca gctgctgacc 600 accetgggee ceetgtteeg gaacteecag ttggeacagt teeactteae caacagagae 660 tgcgactcgc tcaaggggct ctgccgcatc atgggcaacg gcttcgcggg ctgcatgctg 720 ttcccccaca tctccccctg tgaggtgcgc gtgctcatgc tcctgtactc gtccaagaag 780 aagatettea tgggeeteat eeectaegae eagagegget tegteagtge eateeggeag 840 gtcatcacca cccgcaagca ggcagtggga cctggtggtg tcaactcagg cccagtccag 900 atcgtcaaca acaagtttct ggcatggagt ggtgtcatgg agtggcagga gcccaggcct 960 gagcccaaca gtcggtccaa gaggtggctg ccatcccacg tctacgtgaa ccagggggag 1020 atcctgagga ccgagcagtg gccaaggaag ctgtacatgc agctcatccc gcagcagctg 1080 ctgaccaccc tagtgccgct gttccggaac tcgcgcctgg tccagttcca cttcaccaag 1140 gacctggaga cactgaagag cctgtgccgg atcatggaca atggcttcgc cggctgcgtg 1200 cacttttcct acaaagcatc gtgtgagatc cgcgtgctta tgctcctgta ctcttcagag 1260 aagaaaatct tcattggcct catcccccat gaccagggca actttgtcaa cggcatccgg 1320 cgtgtcattg ccaaccagca gcaggtcctg cagcggaacc tggagcagga gcaacagcaa 1380 cgagggatgg gggggtagtg gttaccccgg gctgggcccc tccaggagtc acagatgagg 1440 ecceggaga gaetggtgae aegettetga geaggggeee etggggaett eaactgeeea 1500 gcaacatgga ggatggtgtc ctgaggcctc caaggacggt ccccacccct ctacgtttcc 1560 ccaataaagc cttttaaaaa cctqccaaaa aaaaaa 1596

```
<210> 5697
<211> 3681
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (936)...(2673)
<223> similar to gill96425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5697
cacttetgta atatgettee ecctgaacag ateteteet ecceetete caceccaaa
                                                                       60
atgcttaaaa ggtaacctga ctctttgttc tgggctcagt cctttggata ttaatctgac
                                                                      120
tgggttggct ggtgcaccta aataatacat atatcctcct caaccccatc ggtctctctg
                                                                      180
attcctaaat catccccaaa catttctggt ggcccatatg gggattggag ataacagatt
                                                                      240
tactgtctcc tttgcccatg ggactagggc cctggggctg tggaagacct ggcatccaag
                                                                      300
gcatgccatg ggggagtttc acccggatgg agactggctc tccccgcatc ctgcccagca
                                                                      360
gtgcaactga acctgagatg gggctgcagg atgacaccag cacttcagga accgcggtgt
                                                                      420
cacaccttgg attcaccata gctggctgaa actagcagca gcagtgactc ccgactatga
                                                                      480
ccagtggatt aaccaacaag accetgattg ccccacecga atagacetae ggegaateee
                                                                      540
aaccaccagt aagaaggaca actgccctgc tctgaccaca ctggaggctg gtcagtctac
                                                                      600
acatggctga agcttgaaga tcttgcaagc tcttgctctt agtcacatcc tggaagctga
                                                                      660
ctagtctaca cacagccgaa gctaagagga ccatctctag ataagtaaat gtagataaaa
                                                                      720
tttataagcc tagttataat tgttctgttg ttacattatt actgcaaatg ctgcaaatgt
                                                                      780
ccatgcccag aggaaggttt gccattcctg tgtgtagtgt aagcatgttt ctattacata
                                                                      840
cactaatgtt gttaccattt ctgcctatac tagaagggga gaaatctcta gaaggatgcc
                                                                      900
cacactgtgt acatactacc tgggtaagga ataccatagt taaaactcta ctgtaccata
                                                                      960
cctacagtac aggaaccaag ttaggaacct gcacatacaa ccagaccacc tattcggtct
                                                                     1020
gtgacccagg aaataatcag ctatatgtat gttatgaccc taagctctta ccctatgaat
                                                                     1080
tctggtttga aatacatatt aaatcagagg gagaaaaaga aggagagtta tagctcgaac
                                                                     1140
aaaagaagcc cctccctcct gtaaagggcc tatttccttg tactttgatg cctgctatgc
                                                                     1200
tgcatatgtt cacaatccta aaaaaaacc agaagccagt ctgcaatggt gtaacacaag
                                                                     1260
agaggettag caggageage ectaageate tgtacaaaga accacaaate ggatgeecag
                                                                     1320
actgtaacat tcagtggtcc acactaacac aactccaata tttatattca ggaaggagtg
                                                                     1380
ctctgctaag tagtatgtta accaaaccaa actgtaagac aagaacatgc aatcctttac
                                                                     1440
attttactat cttaaagcca gagatacctt tctggtctac aggacagaca gcactataac
                                                                     1500
gacttgatag actaggagca ggccttggag ttccactact aattgtcaaa aagactaaaa
                                                                     1560
ggactcaaat gcatccaacc ccgcaattct gggtccataa tcattctata agcatttgga
                                                                     1620
taagccagtg cctgagcttc ccccaccaac caaaaactta tttgctcaac tagctgaaaa
                                                                     1680
catagctggc agcttaggaa tttcctcatg ctatgtacgt ggaggaacta atatggggaa
                                                                     1740
ccagtggcca tgggaggcaa aggaattaat gccacaagat aacttcactt cgcttaaccc
                                                                     1800
tgccagtgaa ccaacagcct cagccagtgt ttggttgtta aaaacctcca taattggaaa
                                                                     1860
gtaccgtatc gccgttggga aaggctttca cagaggcagt aggagaaata acctgcctag
                                                                     1920
gcaacagtat tatgatgaga ctaaaaacaa aactctatgg agaagcaccc agaattactc
                                                                     1980
ctacttacca gatccaaatc ctttatctcc attctctacc ctaagccaca cttggcatca
                                                                     2040
actagaggtt ccaaatgctt cgaaagcacc ctctggccta tattggatct gtggagcatg
                                                                     2100
ggcatattgg caactgccag ctaaatggac aggagcatgt gtgtagtaac aatcaagcca
                                                                     2160
ttcttctttc taattcctct aaagcaaggg gaactcttat ggtatccagt tgatgatgaa
                                                                     2220
```

```
aataaaagaa gaactagaag agcataatca caaaaataga cacaaatgtc aaaaaggatg
                                                                     2280
tggacatagg agactggaaa gataatgaat ggcctcctga aagaataatt aaatattatt
                                                                     2340
ggccagctac ctgggtgcaa gatgggtcat ggggttacca caccccaatc tatatgctca
                                                                     2400
actgcatcat aaggttgcag gcagtctttg aaattataac caatgaaaca tcaagggcac
                                                                     2460
tagatttatt ggcaatacaa gcaacacaaa tgagaaatgc tatatattga aatagattgg
                                                                     2520
cattagatta tcacttagcc tctgaaggaa gagtatgtgg aaaatttaat ttaaccaact
                                                                     2580
gttgcctaga aattgctaat aatggccggg ttgtcatgga aatcagagct agaatgcaca
                                                                     2640
agttggccca tgttccaatt cagacttggt cctaatggtc cctqqattct ttgtttggag
                                                                     2700
gatggttctc aacctttgga ggattcaaaa ccctcactgg tgggtttttg tttattcttg
                                                                     2760
gcatctgcct catcctcct taccttttac ccctgtttat taggaggatt cagtcaacta
                                                                     2820
tagaggcagt aataactcaa cacactaccg cacagttgat ggcattaacc aaatatcagc
                                                                     2880
cactgccagt agaagaagct cagctctgtg aagaggtggc aaatagtggt gctttctatt
                                                                     2940
aacacctttg ttataaaaag caacaaaggg gggaaatgga acaggaatta aaagaaatta
                                                                     3000
aagaatgcat aagcaaaaac tcaattgtat gtagggaaac ccaattcctc ctgaggaaga
                                                                     3060
gaaagaggtg gagtccttta aaaattcact gcctgttttt ccgtctqtaq ctaqtqaqcc
                                                                     3120
ttatctctcc ctttcccagg cattgtgaag accetgtttc tccagctgtg cagctgcatg
                                                                     3180
gtcactagac agataaactc aagttgtaaa acatgttttt ccttgaaaag taagaaatga
                                                                     3240
tgtaatacat gtctcaactg aataactgtc tttgtttctc acttctgtag taagcttccc
                                                                     3300
cctgcacaga tctcccctct caccccatga aatgcttaaa aggtaacctg actctttgtt
                                                                     3360
cagggctcag tcctttggat gttaatctga ctgggctggt gcacctaaat aataaatatc
                                                                     3420
tccctgaact ccatcagtct ctctgattcc ttaaaaatcc cgctacattt tgtgtaatga
                                                                     3480
actggcaaca agagaaagtt ggtcgaagaa aggcagagga actgtgtctt gtaagaatta
                                                                     3540
gaatcgaggg gctccataat catctggcat ccgttcaatg ttgtatctat ggttagaaat
                                                                     3600
gtacatgata ggaactccag gaatcttacg gattcttctt ttcaggtccc ggtcaactgt
                                                                     3660
ggccacaatg taacactttc c
                                                                     3681
     <210> 5698
     <211> 2004
    <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (86)...(933)
     <223> similar to gi2072957 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5698
agttttcaac gtctatttca ttccctgctt cagaggacct ctttaatctt tgattttggt
                                                                       60
ccctgtttct aagaaaagca actgaaaagg tcgtaatacc gcccctgaga aaaaaggagc
                                                                      120
agogotaaat aatogagaaa atgootooto ttgaaaoqga tatagagatg gaaacaagat
                                                                      180
ataagaagga ttgagaatca tataatacag gagcttaaac acctatgcgc gatgataaag
                                                                      240
agggtactat tagagcgctt ggaaaatacc aggaagttga gagagttaac agaagggcgc
                                                                      300
acgctggatt ggccacaaaa tcgaattact gaagtaagtg caaaacgaca aattgtcaca
                                                                      360
gaatacagag aaaaggggaa aagaaattaa gaggagaaaa agagagatct agagggccgg
                                                                      420
tccaggagat acaatctatg cataatagga atacctgaaa ctgaggacag agcaagtgga
                                                                      480
gctgaaacaa taaaggatct acttgaaaaa attttccaga attgaagaac qaactagatc
                                                                      540
```

600

660

720

tacaaatgga aaaggctcat aggatacctt taaagtttaa tgaaaagaaa gcagcatcta

gacatatccg ggtgacgttt ttgaatttca aagacgaaac attttacaag catccagtca

gagaaagcag gttacttaca aaggggcaaa agtcaggctg acctcagatt tttctcctgc

```
aattctaaat gccagaagac agtggaacaa tatctagagt gttaagggaa aataattttg
                                                                      780
agccaagaat tatatactct gccaagttat catttcttta caaaggaaac tggaagacat
                                                                      840
tcttagatat acaggggtta ggaaagtata tcaaccaaga actttccctq aaaattttqc
                                                                      900
tgaaggattt actgcagcta acagagaacc tgaattaaaa taagaatagg gaggcaattg
                                                                      960
tatgaaagaa ctgatggtat gcattaaaac tagttaagga gcattaagtt taaattgtta
                                                                     1020
tgtatagggc attaaaacta aatacaaaaa tagaaacata agctqqqtqt aaaatttcaq
                                                                     1080
tttacgttta aactggaagg gcataccaca tgttcaatat attggacaaa tactgtttta
                                                                     1140
tttttagcat gtagtattgt agatacaaat acgcatgttc ttaaqctaaa cctaaqtaaa
                                                                    1200
agggctttgt cactgtagat ttgacaaata acattctaaa tgtcaaatct gacaattgga
                                                                    1260
aaacagtaca gttttatttc ccttattttt aagtatagca ggaaaaaaat aacaagtttg
                                                                    1320
tccatgttac tactgatact gtaaagaaac ttccaaatca ctggtttggg agggggtgga
                                                                    1380
tacatcctca ttttctgtac atgatgcatg gggaaaaaca gtagttactg catcatatag
                                                                    1440
ttccaagtaa atcatatagt tccaagtaaa tttgacatgg aaataagtgt taactacaaa
                                                                    1500
aatagaatat atacattcca atgtttggaa aagaagtggt aaaaagaaaa atagcaaaaa
                                                                    1560
gacactaaaa ttagcaaaaa gtagattgac agtacagatg acctataaac tggttaaata
                                                                    1620
gccctattac aattgaaatt gggtcaaaaa tcaatctcta acctgagata catttgtata
                                                                    1680
aaacaaatga tcaaagagtt taaagataat ggaaactata aatcatagaa atagcaacat
                                                                    1740
ttttcttaaa atctaaacat aagacatttt atgtaaaaca tacaatatag gatgtaacat
                                                                    1800
ttaacaaact atatggtaaa taatatgaca ttaatatata aaatatatgt tccaqatctt
                                                                    1860
gatgtgggtg atagttttac ttatgtacat cgatatacat ctatttaaaa acatgtacat
                                                                    1920
ttaaattgtt gcattttatg tatttaaaat ttattgagta atccttctgt atgtattatt
                                                                    1980
aaagagaata tagcaaaaaa aaaa
                                                                    2004
```

```
<210> 5699
<211> 2789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (545)...(2356)
<223> similar to gi4959382 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5699
ctggggacgc taggttccgg aacctgacct gagctggggc ctgtgcttcc agcgggtggt
                                                                       60
ggggggcctg gtgtgctggc atcaagtaag ccgactacct cggcaaaggc ttagggacaa
                                                                      120
gagaccagca gcctgaactg gctggggcat ccggaaggct tagatcttgt ggccaagagt
                                                                      180
tcagaccgtg gcgaagtgga gagtgacatg cagttggatg gcggtgactg cgtggtcctg
                                                                      240
caaccctggt tccagtctgg caagcattgt agacctggct gctgaagact gacggggccc
                                                                      300
agggtccgct gcccccaccg ccatcaccac ctcqqaaccc aqqqtaacqc tqtcaqtctt
                                                                      360
tggaccaacc tcgctgtgcc taacaagaat tccagaagtc acccatccga aaggcactgg
                                                                      420
cccatgacac totocactto caatottaaa tottttactt catacottgt otcagatoto
                                                                      480
teetggtace eetteeccae geeettagat aatecatete aatteeteat getaattgag
                                                                      540
gagetatgge tgeaaggeae ettecaggat tteacaceta cacaaatete etttteee
                                                                      600
ttttgccttc tctgcttatg ggatattctg agtccccacc cccaatcact gacagctggg
                                                                      660
cccccttcat cagcctcaca caccacgtat taagtcagtc acaatctccc ctctcctcta
                                                                      720
actgctggat ttgtctttct acacacacc aatgattcac ggctcttccg gctgacctac
                                                                      780
ttacatqqac acagtccaac qtqagcttac acatttctta cttgqctata ccattcttqq
                                                                      840
ctgattcatt cctgaaaccg gttcataacc tggaaactca gctaaacacc tttccttcaa
                                                                      900
```

```
actcagetet etcageatgg tttcaggtag ggetgttgee etcettcace taatagette
                                                                      960
tggactaaca tccatacaaa ccaacacagc atcatctaaa ccaccaatat gggggtacca
                                                                     1020
tttctactca aacttccttc atatccccac cccccttatg tctcagccga acctacccta
                                                                     1080
atccagccca cgccacaatg gtgggacagg ttccccagtc cctatgtggg cttattttta
                                                                     1140
cccttgcact ccctgtagac catcaattct acaccctaat tacaaaatca tatccacctc
                                                                     1200
tgcctggcag aaggtgttat gcttttctgg ctcgcctacc atccacacat ccctacacct
                                                                     1260
caccaccgga tcctctttc tttccttcca tccaattcct ggcttccccg ctgccaactc
                                                                     1320
tgctctctat gtctccagtt taaaggggcc ccctggaaaa aatgtaacaa ttccctcacc
                                                                     1380
tgtgactggt acctgacagc caccacaccg gggcagcaat ggctaacggt tgacaaagac
                                                                     1440
aatttctttc tctctccaaa accaaacagc cttcatcaac tccctagcca agactcccta
                                                                     1500
tcaggccctt acaggtgccg ctctggctgg cagttaccca atttgggaaa acgaaaatac
                                                                     1560
cctatcatgg ctacctacct tcacctacaa cttctgcctg tccaccccca gtctcttctt
                                                                     1620
tttgtgtgat acaaactgat atctttgcct accagccaac tggtcaggaa cttgcaccct
                                                                     1680
ggtctttcag gctccaacca tcaacatcct accccctaac caaactattc taatttctgt
                                                                     1740
agaagcctct atctcctctt cacccataag aaataaatgg gctctacatc tcatcaccct
                                                                     1800
gctaacagga ttaggcatca ctgctgcact tggcactgga atagcaggca taaccacctc
                                                                     1860
aatcacctca taccaaacac tattcacaac cctttctaac accgtagaag atatgcacac
                                                                     1920
ttccattacc agtctccaac gacaattaga cttcctcgtg ggagtcatcc ttcaaaactg
                                                                     1980
gagagteetg gaceteetaa eeactgagaa agggggtaee tgeatataee teeaggaaga
                                                                     2040
atgctgtttc tgtgttaatg aatctggcat tgttcatatc gcagttcgta ggcttcatga
                                                                     2100
cagggctgca gagctttgac atcaagtcgc tgactcctgg tggcaaggat catcccttct
                                                                     2160
aagatggata ccctgggttg cccccttcct aggacccctg atcttcctct tcctgttact
                                                                    2220
aatgattggg ccatgcatat ttaaccttgt atcccgcttc atttcccaaa ggctgaattg
                                                                    2280
ttttatccag gcaagcatgc aaaaacacat tgataatata tttcaccttt gccacgtcta
                                                                    2340
ataccagage ctacgaggaa accattegga agetecagaa eccaggeeet aateacaaeg
                                                                    2400
cccctatcca gcaggaagca gccagatgat caacgacgcc ctttttcctt tttatactaa
                                                                    2460
agtaagaaat aagaatgtta gcccaaactg cactattttg cagaccccta ccattttaca
                                                                    2520
aactggtcag agtggaaaat tccaccaggg cctgagctgt gagaaacatc ctgtcaggca
                                                                    2580
ggtcccaggc ctaacccctg gctgcactaa attccttcat tatcagcagc caaacacacc
                                                                    2640
gcccccaccc cattttcaca acaatcccag acctctcctg cccgggactg taactggtcc
                                                                    2700
agcctgtaag cgggaagggg gctctggcac tagctggtac cccctctccg caggtctttc
                                                                    2760
tcccaataaa tctgtgttgc cattgaaaa
                                                                    2789
```

```
<210> 5700

<211> 1726

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1162)...(774)

<223> similar to gi3002527 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5700
gagtttttt tttttttt tttaaaatta agacaagttt attgagtaaa aaaatgcata 60
cattggaacg gcaaaacatc aataaggccc taaaacaaaa aatacagtta tgctttaaca 120
aattcttagc aatgtggccc acgctttta aaaaattgac gtgttggcag tgttggttag 180
gaacactgac gtacatccca aatagtaata aattcagtat gaaattatac gcataacctt 240
actcaccata ctacttttc tcccaaacta ttgtgacttc tttttgctct ctgattaaaa 300
```

```
caaacaggta acatcettae acetttgete catecettgg getttaaaaa gaatggetgt
                                                                       360
agttagtttt gattcactat atactctctg tacttgagga agagtaagct gtgtttaaaa
                                                                       420
gtgccctttt ccatgtcgtc atgtaccaat accctctgca tttcaaaatg ttgactcaga
                                                                       480
tgtttttccc tctacagaac tagaaaattg tccccccact ttggtctatt tactcatttg
                                                                       540
aagacaaaca gggttactaa gagttttaca taagttattt ctttagagtg acgaagtgtt
                                                                       600
agtttacttc ttgcttagtg gagacaaaaa ttgtgagata aagaggaagg aataggatgt
                                                                       660
acacatttac ccatcaatat agcacccagt gttatttgag caggaccctt ctgttagcat
                                                                       720
ctaaggtaag gttaggacag tcaagataaa atactggatg ttggccagga gcagtggctc
                                                                      780
aagcctgtaa tcccagcact ttgggaggct gaggcaggca gatcatgagg tcaggagatc
                                                                       840
aagaccatcc tggctaacac agtgaaaccc tgtctctact aaaaatacaa aaagttagtt
                                                                      900
agttagttag ccaggegtgg tggtgggtge etgtagtece agecattegg gaggttgagg
                                                                      960
caggagaatg gtgtgaacct gggaggcaga gcttgcagtg agattgcacc actgtactcc
                                                                      1020
agcttgggcg acagagcgag actccatctc caaaaaaaaa caaaaaaaca acaacaaaaa
                                                                     1080
aaaaacactg tatgttaagg gagactcctt cagtatctaa gagcacttgg gggtggactg
                                                                     1140
ggggagaagg gatgacttca tttaccccca tagttatgga gtcttgagtt ctaagaaaat
                                                                     1200
tttcatccct attgattttt atgctaaaaa cagaatctta caaatgtgat agctatatat
                                                                     1260
ccaaatgagg tggtctagta caagcatttc tgaaaaaatt tttgaatgac aaaattttat
                                                                     1320
cctaagcgat atgttttcca agtgaatata attctagttt aacacaacat tgcaagtcag
                                                                     1380
gtgtgcacat tttactaaca aacatatatc caatgtgatt tccagggcct tctcccagaa
                                                                     1440
gcaaaaggag ttggaaagta gtctcctgcc tttagctgaa aatcaagaag agagttttgg
                                                                     1500
ttcttcattt taaatgtaga aaatcaaatc cttcacattt gatttgtggt cttcccaatt
                                                                     1560
attaaaaatg tgctcactgg ctcaactgta tttttcaaat agcctagatt tacttatttt
                                                                     1620
tttaaatgct cattaaaaac ttgtatacta tgtagtaaaa tgctgtactt gttctataca
                                                                     1680
ataaaacaga tacttctttt gtaaaagctt agtagtaaaa aaaaaa
                                                                     1726
     <210> 5701
     <211> 1127
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     \langle 222 \rangle (163) \dots (962)
     <223> similar to gi3287681 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5701
aaaaagcgcc ggcaattggg gtcgcagctg gagatgctgc ggccggcagg gctctggcgc
                                                                       60
```

```
ttatgtcggc gaccttgggc ggcgagggtc ccagcggaga atcttggccg tagggaagtc
                                                                      120
acctctggtg tctctccccg cggtagcacc tcgcccagaa ccctgaatat tttcgaccgg
                                                                      180
gatttgaaaa ggaaacagaa gaactgggca gcccggcagc ccgagccgac caaatttgac
                                                                      240
tacctgaagg aggaggttgg aagtcggatc gcagaccgtg tatatgacat acccagaaat
                                                                      300
ttcccccttg ctttggatct tggttgtgga agaggttaca ttgcacaata tttgaataag
                                                                      360
cttcagttat tccattgcag gaaactattg gaaagttttt ccaagctgac attgcagaaa
                                                                      420
atgetttgaa aaatteetea gaaacagaaa taeetaetgt cagegtttta getgatgaag
                                                                      480
aattccttcc cttcaaagaa aatacatttg acctggtggt tagcagttta agtttgcatt
                                                                      540
gggtgaatga ccttcctaga gcacttgagc agattcatta tattttaaaa ccaqatqqaq
                                                                      600
tgtttatcgg tgcaatgttt ggaggcgaca cactctatga acttcggtgt tccttacagt
                                                                      660
tagcggaaac ggaaagggaa ggaggatttt ctccacacat ttctcctttc actqctqtca
                                                                     720
atgacctggg acatctgctt gggagagctg gctttaatac tctgactgtg gacactgatg
                                                                     780
```

```
aaattcaagt taactatcct ggaatgtttg aattgatgga agatttacaa ggtatgggtg 840 agagtaactg tgcttggaat agaaaagccc tgctgcatcg agacacaatg ctggcagctg 900 cggcagtgta cagagaaatg tacagaaatg aagatggttc agtacctgct acataccaga 960 tctattacat gataggatgg aaatatcatg agtcacaggc aagaccagct gaaagaggtt 1020 ccgcaactgt gtcatttgga gagctaggaa aaataaacaa ccttatgcca ccggggaaaa 1080 aatcacaata aatattatt cagtgtaaaa aaaaaaaaag gggcggc 1127
```

```
<210> 5702
<211> 1940
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1255)...(1671)

<223> similar to gi186800 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5702 gtgcaattca tcgagacgtg ctggcctatc tggccgaggc ctggggcatg gacatcgagg 60 ccaccaaccg agactactag cggcctctgc acgaggcggc ctccatgggc caccgagact 120 gcgtgcgcta cctgctgggc cggggggcag cggtcgactg cctgaagaag gccgactggg 180 tcctcacaga aggcacagag gttgccggtc aaagctgttt tcctgcctgc cagacccctg 240 aatcctctag gttttccatc tgtgccaagg atgtgtgtgt tttgaagacc tggcccctgg 300 cttctaatgt ctcagctgcc tccatctgac agcttctcct ggttggcctt aggactcctc 360 tgatgatggc ctgcacaagg aagaacctgg gggtgatcca ggagctggtg gaacatggcg 420 ccaatccact cctgaagaac aaagatggct ggaacagttt ccacattgcc agtcgagaag 480 gcgaccctct gatcctccag tacctgctca ctgtttgccc aggtgcctgg aagacagaga 540 gcaaaattag aaggactcct ctgcatactg cagcaatgca tggccatttg gaggcagtca 600 aggtgcttct taagaggtgc caatatgaac cagactacag agacaactgt ggcgtcaccg 660 ccttgatgga cgcaatccag tgtggtcaca tcgacgtcgc taggctgctc ctcgatgaac 720 atggggcttg cctttcagca gaagacagcc tgggtgccca ggctctgcac agggcagctg 780 tcacagggca ggacgaagcc atccgattct tggtctctga acttggcgtc gatgtagatg 840 tgagagccac atcaacccac ctcacagcac ttcattatgc agctaaggaa ggacatacaa 900 gtacaattca gactctctta tccttgggag ctgacatcaa ttctaaagat gaaaaaaatc 960 gatcagccct gcatctggcc tgtgcaggtc agcacttggc ctgtgccaag tttctcctgc 1020 agtcgggact gaaggattct gaagacatca cgggcaccct ggctcagcag ctcccaagga 1080 gagcagatgt ccttcggggc tctggccata gcgcaatgac ataaggatgt ttccaagagg 1140 aggcaataaa gtgcatgagt tgctgggagc ctgagcacct ttcgtttttc ggctcagaga 1200 aagccaagtg caacttgctt cagtcatcct gaacctgagt tcaaccaacc gcagccacct 1260 acgtttgacc ccagcgagat caaagttgta tatctgaggt gtaccagtgg tgaagtcagt 1320 gccacatctg cactggcccc caaggtcagc tccctgggtc tgtctccaaa aatggttgct 1380 gatgacatca ccaaccattg actggaagag tctgaggatg atagtgaaac tgaccagcca 1440 cagcagacag gcccagattg aggtggtgcc ttctgcctct gccctgatcg tcacaaccct 1500 caggaaccac cgacagaaag aaagaaacac aaaaacatga aacacagtgg tagcaccact 1560 tctgatgaga ttgtcaacat tgcctaacag atgcagcagc agtctttagc cagagaactc 1620 tctggaacca ttaaagaatt cctgggggcc ggttgcggtg gctcatgcct gtagtcccag 1680 cactttggga ggccgaggcg ggaggatcat gaggtcagga gatcqagacc atcctggcta 1740 gcgtggtgaa accccgtctc ttactaaaaa tacaaaaaaa ttagccaggc atggtggtgg 1800 gcgcctgtag tcccagctac tcaggaggct gaggcaggag aatgctgtga accctggagg 1860

```
<210> 5703
<211> 1512
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (922)...(682)
<223> similar to gi1710216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5703 ttttaattac aaaaaaatt ttattattac aaaacataca atctcacaaa ggtacaattt 60 gaaatacggg gacaccette taactaccae ccaggtgaag aaacagaact ttgtcaggca 120 ccccagaacc cctccaagtg cctcatcaca atgacaactc cttccctcta gaagtagcca 180 ttattcttgt atagtactga ctgtgtttct ttatggtttt atcttatttt ftagagacag 240 ggtcttgttc tgtcacacaa gaacaagtgg acaggtggag tgcagtggtg ttcatagctc 300 actgcaatct tgagctcctg ggctcaggtg atcttcctgt cttagcctcc caaggtgctg 360 ggattatagg cgtgtgtcat tgcacttgac ctagttttat ttttttttt agatggggtc 420 ttgctctgtc acccaggtgt tgcccaggct tgagtgcagt ggcgcgatct cagctcactg 480 caacctccgc ctcccaggtt cacgcaattc tcctgcctcg gcctcccgag tagctgggat 540 tacaggtgcc cgccaccatg cctggctaat tttttgtatt tttagtagag acggggtttc 600 accatgttgg ccaggctggt ctcaaactcc tgacctcaag tgatccgccc qcctcqqcct 660 cccaaagtgc tgggattaca gatgtgaggc accgtccacc gtgcccggcc gagttttatt 720 cttgaatcgt gcatgtctct gttcactaca gtttagtgca ccatttaaat aaatttgttg 780 tcttttaagt tcatcaaaaa tatttctttt gaagcactat aataatgctg gtgatggaac 840 tcgccaccat tattccctgg gagcttctgg cagattctgt cagttggaat ctctaattct 900 tttctcagtg gaccttttta cttgactccc acagttcttt aagtagcttc ttttttcca 960 gggtttcctt tgctcttttt ttcctttctt gtttttctt cgccgcttct cgttttctt 1020 tgtgaacagg actgttttca ccattgtaga aaacatctac tttctcttgt aggattttcc 1080 qaqctaqctt tctqttctga tcaactgatc ttgtctgatg gcactttaca acgatgcctg 1140 aggggatgtg cttcagcacc acgcagttgc tggttttgtt ggttgcctgg ccccctggac 1200 cgtgtccttt cacaaactgc tcttcgagtt cattctcatc caaggaaagc agtgcagggt 1260 agtccttctt gcctgccatc tggaccggag tgacagctat tcctggggat aacaacgtca 1320 getteteeca aageeggagt eeceatggeg eegggeatat tegggteagt ggtgtaggaa 1380 aatgaaataa acccacggtg ctcataagga acgtggctct gctggctgag gacctggtct 1440 caggacccga ctcgtgccct caacgttcta gggatatcca aatcacctca gcgqaggatt 1500 cgcaatcgcg at 1512

```
<210> 5704
```

<sup>&</sup>lt;211> 963

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
     <221> misc feature
     <222> (212)...(916)
     <223> similar to gi1542885 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5704
ttttttttt ttgccgctgt caacagacag tttattctat atacaaacac aattttgtac
                                                                       60
actgcaatta aatagaatgg aatgagcgct cctccgcatt cctccccgag tgactggttt
                                                                      120
ggccgccggc ccactccatc cccgagtggg actggaccac ggccctggct gctgccactg
                                                                      180
atgttggcgc ctgcacccca cgtccctatg cccgaggcgc aagctctgct ctcccgggga
                                                                      240
ccccaggcct ggcgcacacg cggggagggc ggggccatgg agaaggcact gcagggagca
                                                                      300
ccaggcagag ccgggctgag gccggccggc actagggcgc gaggccccac cccaagccgg
                                                                      360
cetetectee acaceteege ettgeteaga queetqeace atggqueece actecateet
                                                                      420
caggacggtt cactgcagac ctaccaagac ccctccagaa ccttccgcgg aaccccaccc
                                                                      480
cctctccttg ctgaccagct caaacacctc actagcgggt acaagcctcg ggcgcgacct
                                                                      540
cacaccaggg ggaggaaagc cgccttccgg gcaaacccca cgaaaccctg aaagcccccg
                                                                      600
acacaggetg ggcagtecca gaggaaggag gtggetggee teeeceacee ecaegggete
                                                                      660
gggaaggtca ggcccagcca gcaggggtca gaggcggctc agctgtgcgg ctcaggaccc
                                                                      720
cacctccgag ggcgcctccg ttggggccat ggaggccggg ctaggcccgc ctaccqcagc
                                                                      780
ccccagggga gttgtgtcag aagctgcgga gtcactcggg gggacactgt cctggggggc
                                                                      840
gtgggggagg cccccagcag ggcccagcgg gctggctgga cgccgctcca ggagggaggc
                                                                      900
gctcaggccg gacaggaagg aggcgtctgt gatgatggca gcggtctctg ccatccaacc
                                                                      960
                                                                      963
    <210> 5705
     <211> 1521
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (156)...(95)
     <223> similar to gi180279 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5705
tttgagatgt atttcccaga aaagcaacat gatgaaaatg gtcagaaaag gcaatttcct
                                                                       60
tcctcttttc taatttggct ctggagccac cagcagaacc tcttcaatat cttgcatgtt
                                                                      120
acagatttca ctgctcccac cagcttggag acaacatgtg gttcttgaca actctgctcc
                                                                      180
tttgggttcc agttgatggg caagtggtag acaccacaaa ggcagtgatc actttgcagc
                                                                      240
ctccatgggt cagcgtgttc caagaggaaa ccgtaacctt gcactgtgag gtgctccatc
                                                                      300
tgcctgggag cagctctaca cagtggtttc tcaatggcac agccactcag acctcgaccc
                                                                      360
ccagctacag aatcacctct gccagtgtca atgacagtgg tgaatacagg tgccagagag
                                                                      420
gtctctcagg gcgaagtgac cccatacagc tggaaatcca cagaggctgg ctactactgc
                                                                      480
aggtctccag cagagtcttc acggaaggag aacctctggc cttgaggtgt catgcgtgga
                                                                      540
```

```
aggataagct ggtgtacaat gtgctttact atcgaaatgg caaagccttt aagtttttcc
                                                                      600
actggaattc taacctcacc attctgaaaa ccaacataag tcacaatggc acctaccatt
                                                                      660
gctcaggcat gggaaagcat cgctacacat cagcaggaat atctqtcact qtqaaaqagc
                                                                      720
tatttccagc tccagtgctg aatgcatctg tgacatcccc actcctqqaq qqqaatctqq
                                                                      780
tcaccctgag ctgtgaaaca aagttgctct tgcagaggcc tggtttgcag ctttacttct
                                                                      840
ccttctacat gggcagcaag accctgcgag gcagagacac atcctctgaa taccaaatac
                                                                      900
taactgctag aagagaagac tctggggtta tactggtgcg aggcttgcca cagaggatgg
                                                                      960
aaatgtoott aagogoagoo otgagttgga gottoaagtg ottggootoo agttaccaac
                                                                     1020
tcctgtctgg tttcatgtcc ttttctatct ggccagtggg aataatgttt ttagtgaaca
                                                                     1080
cttgttctct gggtgacaat acgtaaaaga actgaaaaga aagaaaaagt gggaatttag
                                                                     1140
aattotottt ggattotggt catgaaaaga aggtaattto coagoottoa agaagacaga
                                                                     1200
catttagaag aagagctgaa atgtcaggaa caaaaagaag aacagctgca qqaaqqqqtq
                                                                     1260
caccggaagt gtaccctagg gggccacqta qcaqcqqctc aqtqqqtqqc catcqatctq
                                                                     1320
gaccgtcccc tgcccacttg ctccccgtga gcactgcgta caaacatcca aaagttcaac
                                                                     1380
aacaccagaa ctgtgtgtct catggtatgt aactcttaaa gcaaataaat gaactgactt
                                                                     1440
caactgggat acatttggaa atgtggtcat caaagatgac ttgaaatgag qcctactcta
                                                                     1500
aagaattctt gaaaaactta c
                                                                     1521
```

```
<210> 5706
     <211> 789
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (289)...(648)
     <223> similar to gi208157 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5706
aggcagccac tttctagaga cagttagctt cattqqacta atctqqqqaa tctqaaqttc
                                                                       60
aaggacctca ccctgttact aatgttgcta acttcctctc cacctctqtt tatgattcct
                                                                      120
ctgcgtgtaa acagagcagc tccaccagc tccacactcc agctaccaga gaagcctctg
                                                                      180
gaacaaacat ggaatateet tacceeette accaaqaeee tacetqtete caateteaqe
                                                                      240
agaaaagtaa caagctgggc cggggtgggg atcccggtga catgtctacc agaggcagga
                                                                      300
agcggagggg agaggagac agagtgtggg ctgggggtcc caaccactag gggacccccc
                                                                      360
agaagtcagc atcattcggg agcctgaggc gctgggaatt ccaaggcctg gccagaaagc
                                                                      420
cccagtctaa gggacgcatc ccagtcccca gggagcccca atctaaggga tacagcccca
                                                                      480
tecteaggga geoceagtet gagggagaea cagaetegte eteagggagg cecagtetaa
                                                                      540
gggacacage eccatectea gggageteca atetaaggga tacageeetg teeteaggga
                                                                      600
gccccagtct gaagggagac tcagtgctct cctcagggag cccccqtctq qatcagggaa
                                                                      660
```

ggagctctgt ttccctgtgg aggtgactgc tcaggaggaa agtccttttc catggcactc

cctgacttcc ccttcccttt ctctcctgca gccagcaggg ctccagcggg ggagcggttg

<210> 5707

tctttgggg

720

780

789

```
<211> 1045
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1046)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (728)...(28)
     <223> similar to gi200545 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5707
ctggccccag gctttcccac atggaaggtg gctgcatgcc aaggggagga gcgacacctc
                                                                       60
caggetteeg ggageecaga gageatgtgg caggeagtqq qqeetettea teageageet
                                                                      120
gcctggctgg ctcccttggc tgtgggcagg tagcacgcct gctggcagag gtacctggtg
                                                                      180
gctgccctgt tcgcatcagt ggcgatgact ttatttgcqq agcatttctg caagcgttgc
                                                                      240
ctggatgcgg tggtgcattg tgggccctct gggctcctgc ctcagaatgt cagtgagcac
                                                                      300
catgctggag gtcacccagc actgtggcag cgcccaggag ggcatagggc agcctaccac
                                                                      360
ctccaagggg gcaggcgccc tcatctgggg ttgggtctgt gctgagctgg agggcctcta
                                                                      420
gggaaccgtg gggcagggtg gccagctgct ggctcccaga gcgcagccca ggcgtcctca
                                                                      480
acggggagcc ccaaatgtcc acgcccagaa caacagttgg caggacaggt gtgacacagc
                                                                      540
cacagcagag gcaaggggtg ccaggagtcc ccagcggcat cctcggggag atgctggtga
                                                                      600
ggggtccgta cagggtgggg tccccacccc tagcccctta ctgaggggg agtgcagcag
                                                                      660
ttggcctgct tgtctggcgg agaaagccag ctccctgcac cctcggggct gagtcagatc
                                                                      720
tgggtctgcc gcaaaggcct tgcctagacc aggtcacact gatgccctgg tttccctatc
                                                                      780
tgtaaaatgg ggccaatgac acctacctca ctgggtcacc atcgagatca atccttctcc
                                                                      840
ctgccccgac acctcgggca catcgcatgc actcagagca cagagccggg cagacgcagc
                                                                      900
acctgcatgg ggagcccagt gcccggcaca gcacaggggc tttcagggag gccacgcagg
                                                                      960
gccgtggggc tgaaccacgc tctcgttttg tcaggcagct atgcagnagc tcttccttgg
                                                                     1020
tattgggttg ttntggtttt gtatt
                                                                     1045
     <210> 5708
     <211> 928
     <212> DNA
    <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (778)...(446)
    <223> similar to gi4927776 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
```

<400> 5708

```
tttttttttt ttgcgtgagc aataaagctt tttaatcacc taggtgcagg caggctgagt
                                                                       60
ccaaagagag tgtcagcgaa gggagatagg ggtggggccg ttttatagga tttgggtagg
                                                                      120
taaaggaaaa ttacaatcaa agggggttgt tctatggcag gcaggggcgg gggtcacaag
                                                                      180
gtgctcagtg gggaagcttc tgagccagga gaaggaattt cacaaggtta atcgctcagt
                                                                      240
taaggtgggg caggaacaaa tcacaatggt ggaatgtcat cagttaaggc aggaacaggc
                                                                      300
cattttcact tcttttgtga ttcttcactt gcttcaggcc atctggatgt atacatgcca
                                                                      360
ggtcacaggg gatatgatgg gctttgcttg gggcttcaga ggtcttgaca cacatcacta
                                                                      420
agettaetet atggattege etcaaattet ttettgeaag agatecaaga atgetetett
                                                                      480
ggggtctgga tagggacccc tttccgttga caagacctcc ccgcctccgc ttttaattgt
                                                                      540
ttggccttca ttcctcttct acagtgctcc ctgcaatcag tactggtgct gtacatattt
                                                                      600
gctagcttcg tacatacggc acgaagtaga tgctcagtaa atgttggttg actgagtatc
                                                                      660
ctctgcatct cggtgacatc acatcctgcg tgccgtggcg tcattctgca ttcctctgcg
                                                                      720
ggaggetcag atccggaggg tttaagtggt tgtttataac atqcaccqaa catatccaac
                                                                      780
ggaggctgtg gtttccgacc gcccacaaaa agcgcggttg gcgggagtgc gggttcgggg
                                                                      840
teggetggea getgggagae teeagetetg ggeggaaaca caetgeeteg gaggegeeeg
                                                                      900
gacgcgtggg tcgagccagt aataacga
                                                                      928
```

```
<210> 5709
     <211> 3918
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (26)...(2915)
     <223> similar to gi4191594 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5709
gcgcggagga gggggcgacc acaagatggc ggacctctcg ctgcttcagg aggacctgca
                                                                       60
ggaggacgca gacggatttg gtgtggatga ctacagctca gagtctgatg tgattattat
                                                                      120
acetteagee etggaettgg cetecacaaa gatgaaatgg ttgaaegeee eetgggaaga
                                                                      180
ttgggacaaa gtatgctgca agtgagaacc atatttaacc agacaaaatg gtggccccgg
                                                                      240
agtttgcctc gatacccttg agggaaagtc tgcgatgatg aaagagattg tattgctgtt
                                                                      300
ttgggaaaga attagccaga ttgggccgat gattcagaac caacttgtga gagcggctga
                                                                      360
attggaacag gtgcctcaca tcgcactgtt tttgttcaag aaaacccgcc tttcaattac
                                                                      420
catatgcttt ttttcaaaat tcttactacc ctattgtggg ttagatacct tggcagatca
                                                                      480
gaattaatca ggtgaggaaa acaagtcagg cagctttgct tggctctgtt ggagcaggag
                                                                      540
ctcattgaac gatttgatgt ggagaccaaa gtgtgccctg tcctcataga gctgacagcc
                                                                      600
ccagatagca atgatgatgt gaaaacagaa gctgtggcta taatgtgcaa aatggctccc
                                                                      660
catggttggg aaggatatta cagagcgtct tatcctccct aggttttgtg agatgtgctg
                                                                      720
cgattgcaga atgtttcacg gttcggaaag gtctgtgctg ccaattttgg agatatttgc
                                                                      780
agtgtagttg gccagcaagc tactgaagaa atgttgctgc ccagattttt ccagctttgt
                                                                      840
tctgataatg tatggggagt ccgaaaggct tgtgctgaat gcttcatggc ggtttcatgt
                                                                      900
gcaacatgtc aagaaatccg acggaccaaa ttatcagcac tttttattaa tttgatcagt
                                                                      960
gatccttcac gttgggttcg ccaagcagct tttcagtctc tqqqaccttt catatctact
                                                                     1020
tttgctaatc catctagctc aggccagtat tttaaagaag aaagcaaaag ttcagaagag
                                                                     1080
```

1140

1200

1260

atgtcagtag aaaacaataa aaggaccaga gatcaagaag ccccagagga tgtacaagtc

aggccagagg atactccttc agatctcagt gttagtaatt ccagtgtcat actggaaaac

acgatggaag accatgctgc tgaggcatcc gggaagcctc taggtgaaat tagtgttcca

```
ctggacaget ctttactttg tactttgtcc tcagaatctc accaggaagc agctagtaat
                                                                     1320
gagaatgata aaaaacctgg taactacaaa tctatgttac gaccagaggt tggcaccact
                                                                     1380
tcacaagatt cagctctctt agatcaggaa ttgtataact ccttccattt ctggaggact
                                                                     1440
cctcttcctg aaatagatct agacatagag cttgaacaga actctggggg aaaacccagc
                                                                     1500
ccagagggac cagaggaaga atctgagggc cctgtgccca gttctccaaa catcaccatg
                                                                     1560
gccaccagaa aggaactgga agaaatgata gaaaatctag agccccacat tgatqatcca
                                                                     1620
qatqttaaag cacaagtgga agtgctgtcc gctgcactac gtgcttccag cctggatgca
                                                                     1680
catgaagaga ccatcagtat agaaaagaga agtgatttgc aagatgaact ggatataaat
                                                                     1740
gagctaccaa attgtaaaat aaatcaagaa gattctgtgc ctttaatcag cgatgctgtt
                                                                     1800
gagaatatgg actccactct tcactatatt cacaacgatt cagacttgag caacaatagc
                                                                     1860
agttttagcc ctgatgagga aaggagaact aaagtacaag atgttgtacc tcaggcgttg
                                                                    1920
ttagatcagt atttatctat gactgaccct tctcgtgcac agacggttga cactgaaatt
                                                                    1980
gctaagcact gtgcatatag cctccctggt gtggccttga cactcggaag acagaattgg
                                                                    2040
cactgcctga gagagacgta tgagactctg gcctcagaca tgcagtggaa agttcgacga
                                                                    2100
actctagcat tctccatcca cgagcttgca gttattcttg gagatccaat tgacagctgc
                                                                    2160
agatctggtt ccaattttta atggattttt aaaatgaccg tcgatgaagt caaggatagg
                                                                     2220
tgttcttaaa cacttgcatg attttctgaa gcttcttcat attgacaaaa gaagagaata
                                                                    2280
tctttatcaa cttcaggagt ttttggtgac agataatagt agaaattggc ggtttcgagc
                                                                    2340
tgaactggct gaacagctga ttttacttct agagttatat agtcccaqaq atqtttatqa
                                                                    2400
ctatttacgt cccattgctc tgaatctgtg tgcagacaaa gtttcttctg ttcgttggat
                                                                    2460
ttcctacaag ttggtcagcg agatggtgaa gaagctgcac gcgqcaacac caccaacgtt
                                                                    2520
cggagtggac ctcatcaatg agcttgtgga gaactttggc agatqtccca agtqqtctgg
                                                                    2580
teggeaagee titigtetitig tetgeeagae titeatiqaq qatqaetiqee titeeeatiqqa
                                                                    2640
ccagtttgct gtgcatctca tgccgcatct gctaacctta gcaaatgaca gggttcctaa
                                                                    2700
cgtgcgagtg ctgcttgcaa agacattaag acaaactcta ctagaaaaag actatttctt
                                                                    2760
ggcctctgcc agctgccacc aggaggctqt qqaqcaqacc atcatqqctc ttcaqatqqa
                                                                    2820
ccgcgacagc gatgtcaagt attttgcaag catccacct gccagtacca aaatctccga
                                                                    2880
agatgccatg agcacagcgt cctcaaccta ctagaaggct tqaatctcqq tqtctttcct
                                                                    2940
gcttccatga gagccgaggt tcagtgggca ttcgccacgc atgtgacctg ggatagcttt
                                                                    3000
cgggggagga gagacettee teteetgegg actteattge aggtgeaagt tgeetacace
                                                                     3060
caataccagg gatttcaaga gtcaagagaa agtacagtaa acactattat cttatcttga
                                                                    3120
ctttaagggg aaataatttc tcagaggatt ataattgtca ccgaagcctt aaatccttct
                                                                    3180
gtcttcctga ctgaatgaaa cttgaattgg cagagcattt tccttatgga agggatgaga
                                                                    3240
ttcccagaga cctgcattgc tttctcctgg ttttatttaa caatcgacaa atgaaattct
                                                                    3300
tacagcctga aggcagacgt gtgcccagat gtgaaagaga ccttcagtat cagccctaac
                                                                    3360
tettetetee caggaaggae ttgetggget etgtggeeag etgteeagee cageeetgtg
                                                                    3420
tgtgaatcgt ttgtgacgtg tgcaaatggg aaaggagggg tttttacatc tcctaaagga
                                                                    3480
cctgatgcca acacaagtag gattgactta aactcttaag cgcaqcatat tgctgtacac
                                                                    3540
atttacagaa tggttgctga gtgtctgtgt ctgatttttt catgctggtc atgacctgaa
                                                                    3600
ggaaatttat tagacgtata atgtatgtct ggtgttttta acttgatcat gatcagctct
                                                                    3660
gaggtgcaac ttcttcacat actgtacata cctgtgacca ctcttgggag tgctgcagtc
                                                                    3720
tttaatcatg ctgtttaaac tgttgtggca caagttctct tgtccaaata aaatttatta
                                                                    3780
ataagatcta tagagagaga tatatacact tttqattqtt ttctagatqt ctaccaataa
                                                                    3840
atgcaatttg tgacctgtat taatgattta aagtqqqqaa actaqattaa aatatttqtc
                                                                    3900
ttttaactag ttaaaaaa
                                                                    3918
```

```
<210> 5710
<211> 1933
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (1631)...(655) <223> similar to gi5225320 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5710
ttttttttt ttgttagttg tttttgtttt taatttgtct ccaataagca atgtcttctg
                                                                     60
ccccatccag ccatgggaag tgggtcccac gtgaaggggg ccccaccacc ccactttggg
                                                                    120
aagctgaagg ctagagactt cgggagcccc ccccggctca agactccccc ctacgctgqq
                                                                    180
240
cttaggccac aggcccccq qqggcaggga qacaqaqtgg qgqqqccqa aqctccctqq
                                                                    300
tcctggggaa gagttaaaaa gttctggggg taggccctgg gccccgtggg ggcaagttta
                                                                    360
agagatgagg ggaggtttac tcctttaggc ccagggagtt ggttagaaga cagttggggg
                                                                    420
ctggtagaaa atgcctggtt taaagccttg gcctctagga ggtttttaga gatttgctgg
                                                                    480
ggttgggggc ccagggttgc tgggaccccc agtttttggg gaagggagct gtaagagatt
                                                                    540
gggggatgtt ctgagctccc cagacaagaa ctgctggtta agagggggcc aggcccggtt
                                                                    600
ggggctcagc tgtccctgag gagctcggca tcccqcctqq gagatqcaqc tqtcactqqq
                                                                    660
gtttctccct ctctgttgtc ctggcctcgt ccttggcagg tggcggggac ttcttggggg
                                                                    720
aagctgaagt gctggggttg gggacccccg cccccgactg ggcatctatg ctqqcqtqcc
                                                                    780
tccttgcgga caaggtcctc cagctccttc ttccatccaa ggagctcagc aagggccagg
                                                                    840
cagccetggt cgcattcacc cagccaggec acqtccctqc aaqqaqqtac ccatqaccaq
                                                                    900
gaggaggtcc accttcagga agtctgactg catacaggag aagaaacgcg ctgggaggct
                                                                    960
ctcaccaaaa aagacgatta tcaggcttca ccaggctctg acagtcttca cacttgggcg
                                                                   1020
tcacctcaga gaagatcttc tctttcatcc agcttagcgg gtattcgtgc cggcagctqg
                                                                   1080
cgctgacgca gtgtgatgtg tagaagggtg ccgtgcgcct ccaacaaagt cctcctgttc
                                                                   1140
cagcccggct attcgctcca gggtatctat gttctgcgtg tagcagcgca ggaqtagccc
                                                                   1200
cttgtccttc agcaggcgcc atgaagtagt gaacaagatg gttgqccttg aaactgcccc
                                                                   1260
aggataagag ttcccttggc gagggcgaag aagggttccg gatgtttctt gaaaatagct
                                                                   1320
gatctccaaa gaatggcctc tgggttaggg aaagatggtc acttctctag gttgttcaat
                                                                   1380
aagaggccgg tggatggaga agcgaaaagt cggggatgcc tgcggatgtg gagattccag
                                                                   1440
ctcccaccaa acagatgact ctgcgacagc gttcgctctg catgtaccgg gccacccctt
                                                                   1500
ccaaggtcag ctcgtccagc agacgctcct tctggctgcc caggctgagc gtctgggaga
                                                                   1560
ataagttccg caggaagtcc atgtctqctt ctccaccaqc qqctcctccc tcagagtctq
                                                                   1620
aatctgagtc ctggaagggg tggggtggag tggccaggcc cgagaggtgg gattagggag
                                                                   1680
ggaggagagg gggtgatacc aggtttgggg aaaaggctgt ggcaggaagg tggcctgagg
                                                                   1740
aagtgcgggg tggtggagag actgcactgg ggctagctcc agggctctqq qacaqqctqc
                                                                   1800
cggggttgga gtcctggcca tgcccgtccc caggagcaag acctcatgtg agtggctttg
                                                                   1860
ctttgctttt cttttttgag acagtgtctc gctctgttgc ccaggctgga gtgcactggt
                                                                   1920
gcagtcacag ctt
                                                                   1933
```

```
<210> 5711
<211> 4268
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2249)...(2871)
<223> similar to gi841318 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5711 aaggagaaaa gagtgacagt acaattgcct acagaatcca tacagaagaa ccaggaagat 60 aagctcaaga tggttcccag gaagcaaaga gaatttagcg gatctgacag agggaaactt 120 ccaggaagtg aagaaaaaa tcagggacca tcaatgattg gtcgaaaaga agagagatta 180 ataactgaaa gaaaacacga acatctgaag aataaatcag caccaaaggt cgtcaagcaa 240 aaggttatcg atgcacatct tgattcacag actcagaatt ttcagcaaac acaaatacag 300 accgctgaaa gtaaagctga acataaaaaa ttgccccagc catataatag tctgcaggaa 360 gaaaaatgtc tcgaagtcaa gggcatacaa gagaaacaag tcttctctaa tactaaagat 420 tcaaagcaag agattacaca gaacaaatct ttcttttcct ctgtgaaaga atcccagcgg 480 gatgatggaa aaggtgcctt aaatatagtg gaattcttga gaaaacgtga agaactgcaa 540 cagattttgt cgagagtgaa acagtttgaa gcagagccaa ataaaagggg ccttaaaaca 600 tttcagacac tattaaatac tatcccagga tggctgataa gtgaagataa gagagaatat 660 gcagttcaca ttgccatgga gaataattta gaaaaagtaa aagaagaaat aacacatatt 720 aaaactcaag cggaagatat gcttgtgtcc tatgaaaata taattcagac agccatgatg 780 tcctccaaaa caggaaaacc gggaaataaa cccactagtc ttgatgaaac atcatccaaa 840 gtatctaatg ttcatgtcag caataataaa aatagtgaac agaaagaaaa taaaattgcc 900 aaagagaaaa cagtacagca ccaagtaaca gctcatcatg aagcaactgt tcgtagtcac 960 gtgaaaaccc atcaggaaat taaacttgat gatagcaaca ttcctcctcc ctctttaaaa 1020 acacgcccac cgtcaccaac ttttatcaca atagaatcta ctgcccgacg aacagaaaac 1080 cctactaaga acgagettte teagteeect aaaaaggaca gttatgttga acceecacea 1140 agaaggccca tgtcgcaaaa atctgaaatt cacagagcaa acacttcccc ttctccaccc 1200 aggagtcgct ctgaacaact tgtcagactc aaagacacca ctgcaaagtt atccaaaggg 1260 gccatcccat gtccagcagc aaccccggtt ccaattgtag agaagaggtc tgaaatcatc 1320 atgtctcctg caacacttcg tcgtcaaatt aagatagaaa ctcgcggtac ggactctcca 1380 cctacaatca caataccagt aaatataaat catgctgcta gtggttcctt cagaqaatct 1440 gtggacgctc aagaggaaat caggaaagtg gagaagagag ctacttatgt tcataaagat 1500 ggactaaatt ccactgatca catggtgccc gacactgaaa gttatgatgc agttgaaatc 1560 atccgcaagg ttgcagtgcc tcctcgcctg tcagagcaca cacagagata tgaagcggcc 1620 aaccgaactg ttcaaatggc tgaaaatttc gtgaatgacc ctgaaaatga aataaacaga 1680 tggttcaggg aatttgagca tggcccagtt tctgaagcaa agtcaaatag aagagtttat 1740 gcaaagggag aaacaaacca taacatacaa caagaaagtc gtacattttg taaggaggaa 1800 tttggattaa catctttagg aaacacgagt tttacagact tttcttgcaa acatcctaga 1860 gaactgcgag aaaagattcc tgttaagcag cccaggatct gctctgaaac caggtctcta 1920 agtgaacatt tctcaggcat ggatgcattt gagagtcaaa ttgttgagtc gaagatgaaa 1980 acctetteat cacatagete agaagetgge aaatetgget gtgaetteaa geatgeeeca 2040 ccaacctatg aggatgtcat tgctggacat attttagata tctctgattc acctaaagaa 2100 gtaagaaaaa attttcaaaa gacgtggcaa gagagtggaa gagtttttaa aggcctggga 2160 tatgcaaccg cagatgcttc tgcaactgag atgagaacca ccttccaaga ggaatctgca 2220 tttataagtg aagctgctgc tccaagacaa ggaaatatgt atactttgtc aaaagacagt 2280 ttatccaatg gagtgcctag tggcagacaa gcagaatttt cataagtcct gcttccgatg 2340 ccaccattgc aacagtaaac taagtttggg aaattatgca tcacttcatg gacaaatata 2400 ctgtaaacct cactttaaac aacttttcaa atccaaagga aattatgatg aaggttttgg 2460 acataagcag cataaagata gatggaactg caaaaaccaa agcagatcag tggactttat 2520 tcctaatgaa gaaccaaata tgtgtaaaaa tattgcagaa aacacccttg tacctggaga 2580 tcgtaatgaa catttagatg ctggtaacag tgaagggcaa aggaatgatt tgagaaaatt 2640 aggggaaagg ggaaaattaa aagtcatttg gcctccttcc aaggagatcc ctaagaaaac 2700 cttacccttt gaggaagagc tcaaaatgag taaacctaag tggccacctg aaatgacaac 2760 cctgctatcc cctgaattta aaagtgaatc tctgctagaa gatgttagaa ctccagaaaa 2820 taaaggacaa agacaagatc actttccatt tttgcagcct tatctacagt ccacccatgt 2880 ttgtcagaaa gaggatgtta taggaatcaa agaaatgaaa atgcctgaag gaagaaaaga 2940 tgaaaagaag gaaggaagga agaatgtgca agataggccg agtgaagctg aagacacaaa 3000 gagtaacagg aaaagtgcta tggatcttaa tgacaacaat aatgtgattg tgcagagtgc 3060 tgaaaaggag aaaaatgaaa aaactaacca aactaatggt gcagaagttt tacaggttac 3120 taacactgat gatgagatga tgccagaaaa tcataaagaa aatttgaata agaataataa 3180

```
taacaattat gtagcagtct catatctgaa taattgcagg cagaagacat ctattttaga
                                                                     3240
atttettgat etattaeeet tgtegagtga ageaaatgae aetgeaaatg aatatgaaat
                                                                     3300
tgagaagtta gaaaatacat ctagaatctc agagttactt ggtatatttg aatctgaaaa
                                                                     3360
qacttattcg aggaatgtac tagcaatggc tctgaagaaa cagactgaca gagcagctgc
                                                                     3420
tggcagtcct gtgcagcctg ctccaaaacc aagcctcagc agaggcctta tggtaaaggg
                                                                     3480
gggaagttca atcatctctc ctgatacaaa tctcttaaac attaaaggaa gccattcaaa
                                                                     3540
gagcaaaaat ttacactttt tcttttctaa caccgtgaaa atcactgcat tttccaagaa
                                                                     3600
aaatgagaac attttcaatt gtgatttaat agattctgta gatcaaatta aaaatatgcc
                                                                     3660
atgcttggat ttaagggaat ttggaaagga tgttaaacct tggcatggtg aaacaacaga
                                                                     3720
agctgcccgc aataatgaaa acacaggttt tgatgctctg agccatcaat gtacagctaa
                                                                     3780
gcctttgttt cccagagtgg aggtgcagtc agaacaactc acggtggaag agcagattaa
                                                                     3840
aagaaacagg tgctacagtg acactgagta aaatatctat ggccactgac agtccacact
                                                                     3900
taggcactga gagatattga tgttctgaaa taagatttta tgaatttgga tacccttttg
                                                                     3960
aggaacttga tgtaaacatg gtgttcagaa atctcgtgtc tatctcaatg ggatatttct
                                                                     4020
tgtattacac cttgtcattt ttttcacaat ttatttacat ctacttttgt ttgaactgga
                                                                     4080
atgaagagat gaaacactat ggatatgttt tccattcaaa tggcacttta gcatattggt
                                                                     4140
ctgttttcct gtaaaacatc atgggtgtga tttttatact gctgctgctt gtcacaatta
                                                                     4200
ttataacttc tctgtaattt cctctgaaat aaaattgaat cacctgaggt gcaaaccaaa
                                                                     4260
aaaaaqtc
                                                                     4268
```

```
<210> 5712
<211> 1817
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (173)...(1135)
<223> similar to gi3329475 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5712 gcggtggaat tcgaggagcg acggaagcga cgcgggggta cgctgctgcg cggcgcccgg 60 tttcgtgccc gcggccgact gcgcagcctg tccgcqaqtc tqaqatactt acaqaqaqct 120 acaatggaaa agtcctggat gctgtggaac tttgttgaaa gatggctaat agccttggct 180 teatggtett gggetetetg cegtatttet ettttacett taatagtgae ttttcatetg 240 tatggaggca ttatcttact tttgttaata ttcatatcaa tagcaggtat tctgtataaa 300 ttccaggatg tattgcttta ttttccagaa cagccatcct cttcacgtct ttatgttccc 360 atgcccactg gcattccaca tgaaaacatt ttcatcagaa ccaaagatgg aatacgtctg 420 aatcttattt tgatacgata cactggagac aattcaccct attccccaac tataatttat 480 tttcatqqga atgcaqqcaa cataqqtcac aqqttqccaa atqcattact tatqttqqtt 540 aacctcaaag ttaacctttt gctggttgat tatcgaggat atggaaaaag tgaaggagaa 600 gcaagtgaag aaggactcta cttagattct gaagctgtgt tagactacgt qatqactagc 660 cctgaccttg ataaaacaaa aatctatctt tctggccgct cccttgggtg gagcagcggc 720 tattcatctg gcttctgaca attcacatag gatttcagcc attatggtgg agaacacatt 780 tttaagcata ccacatatgg ccagcacttt attttcattc tttccgatgc gttaccttcc 840 tttatggtgc tacaaaaata aatttttgtc ctacagaaaa atctctcagt gtagaatgcc 900 ttcacttttc atctctggac tctcagatca attaattcca ccagtaatga tgaaacaact 960 ttatgaactc tccccatctc ggactaagag attagccatt tttccagatg ggactcacaa 1020 tgacacatgg cagtgccaag gctatttcac tgcacttgaa cagttcatca aagaagtcgt 1080

<400> 5713

```
aaagagccat tctcctgaag aaatggcaaa aacttcatct aatgtaacaa ttatataatg
                                                               1140
tttccctttt tgattattgc attgtatttt aatttgtgca gaatgataaa gaatgttcct
                                                               1200
tttagaagtg tgttatgtct gtacctgtct gaagagtgac attaaacttt gaaaggactt
                                                               1260
cactgctcct ttacgatatt ccaaatagtt ttttacattg gaaaagctaa ttcttgggat
                                                               1320
tettteatac atttteatea aaacttteag tgtgattatg tatteatate tteagtttaa
                                                               1380
tatgtcagta taatagatat tgttcaaaag tttcttgttg ctaaagtggt gtaatctgtt
                                                               1440
acacagatga atagctagat gtggaaagag atatgtaaac aagaaacctt tgggtattgt
                                                               1500
ttcttaagta aatattggga caatcatggt aagcaaactt aqttctqtaa ctqcattttt
                                                               1560
1620
cattttacat gtaaatagca ctggtcatat actgatgtat atggttatct gggttatatc
                                                               1680
tatttttatg taaactctat tttgtttttg gcaagaagtg aaattgagac ttatgtgcag
                                                               1740
gttgccattg aattttgctc tggtgaatgc tgagatccag ctttttctta caaataaatg
                                                               1800
ggaccctgtt ttccaaa
                                                               1817
```

```
<210> 5713
<211> 2610
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2611)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (87)...(1280)
<223> similar to gi5262551 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

cttgtgggaa gagctgaagc aggcgctctt ggctcggcgc qqcccqctqc aatccqtqqa 60 ggaacgcagc cgccgagcca ccatcagtgc ctgggcactt acaggaaggc ttcggctgcg 120 tggtcaccaa ccgattcgac cagttatttg accgacgaat cgggancccg ttccgaggtg 180 ctgaaggcag cagagaacaa gaaaaaagaa gcccggcggg ggcgcgtgtg tggggccctg 240 gggcatagag cgcagctcag ggccggcggg cccacqacca actccaacqc qqcaqqcaaa 300 cagcgtgcgc aaggagtccc agaaagaccg caagaacccg ctgcccccca gcgttggcgt 360 ggttgacaag aaagaggaga cgcagccgcc cgtggcgctt aagaaagaag gaataagacg 420 agttggaaga agacctgatc aacaacttca gggtgaaggg aaaataattg atagaagacc 480 agaaaggcga ccacctcgtg aacgaagatt cgaaaagcca cttgaagaaa agggtgaagg 540 aggcgaattt tcagttgata gaccgattat tgaccgacct attcgaggtc gtggtggtct 600 tggaagaggt cgaggggcc gtggacgtgg aatgggccga ggagatggat ttgattctcg 660 tggcaaacgt gaatttgata ggcatagtgg aagtgataga tcttctttt cacattacag 720 tggcctgaag cacgaggaca aacgtggagg tagcggatct cacaactggg gaactgtcaa 780 agacgaatta actgacttgg atcaatcaaa tgtgactgag gaaacacctg aaggtgaaga 840 acatcatcca gtggcagaca ctgaaaataa ggagaatgaa gttgaagagg taaaagagga 900 gggtccaaaa gagatgactt tggatgagtg gaaggctatt caaaataagg accgggcaaa 960 agtagaattt aatatccgaa aaccaaatga aggtgctgat gggcagtgga agaagggatt 1020 tgttcttcat aaatcaaaga gtgaagaggc tcatqctgaa qattcggtta tggaccatca 1080

tttccggaag ccagcaaatg atataacgtc tcagctggag atcaattttg gagaccttgg

1140

```
ccgcccagga cgtggcggca ggggaggacg aggtggacgt gggcgtggtg ggcgcccaaa
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ccgtggcagc aggaccgaca agtcaagtgc ttctgctcct gatgtggatg acccagaggc
                                                                     1260
attcccagct ctggcttaac tggatgccat aagacaaccc tggttccttt gtgaaccctt
                                                                     1320
ctgttcaaag cttttgcatg cttaaggatt ccaaacgact aagaaattaa aaaaaaaaag
                                                                     1380
actgtcattc ataccattca cacctaaaga ctgaatttta tctgttttaa aaatgaactt
                                                                     1440
ctcccgctac acagaagtaa caaatatggt agtcagtttt gtatttagaa atgtattggt
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agcagggatg ttttcataat tttcagagat tatgcattct tcatgaatac ttttgtattg
                                                                     1560
ctgcttgcaa atatgcattt ccaaacttga aatataggtg tgaacagtgt gtaccagttt
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ctggttttaa atattggaca tactggtttt aatacctgct ttgcatattc acacatggtc
                                                                     1740
aactgggaca tgttaaactt tgatttgtca aattttatgc tgtgtggaat actaactata
                                                                     1800
tgtattttaa cttagtttta atattttcat ttttggggaa aaatcttttt tcacttctca
                                                                     1860
tgatagctgt tatatatata tgctaaatct ttatatacaq aaatatcagt acttqaacaa
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                                                                     1980
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                                                                     2040
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categtgtca agtgaagtag ttttataggt atgggttttt tetececett caceagggtq
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                                                                     2280
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                                                                     2340
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                                                                     2400
aaggttggaa cagcagcact atacatgaaa tataaaccaa aaacctttac tgtttctaaa
                                                                     2460
tttcctagat tgctattatt tggttgtaag ttgagtattc cacagaaagt ggtaattatc
                                                                     2520
tettetetet teeteeatta gaaaattagg taaataatgg atteetataa tgggageate
                                                                     2580
accacttatt aaaacacaca tagaatgatg
                                                                     2610
```

```
<210> 5714
<211> 1026
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (497)...(237)
<223> similar to gi436173 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
tcccaqctga ccacqgcccc tttctctggg gtcagaggga gaagacaggc gcagtcagca
                                                                      180
ggggcagctg ttgcaggtgg gagggttatt ttcccacagg aacaaaggtc tccatgatga
                                                                      240
tacggggtct ctatagtcat gttgagagcc taatggccct tggcataatt gctggtgtcg
                                                                      300
gggtagaagg tgtcttggag tttgctcaag tggttgagag ggagggaggt gccatagact
                                                                      360
tggaggaact gggcacgaag ccaaggatac aaatccaggc agggctgtgg ggcaggatag
                                                                      420
agagcagggc cttctactga aggagtgact caggaaggag gaggggaagg tgacaagcc
                                                                      480
ctgggcagga gccctgtggc catggatcat tttaaattga gaccagagag tgagcagtcc
                                                                      540
agggcagcta taaccttggc tagaaagggc agaggcagat gggcctgctc catctcgcct
                                                                      600
cttaagaagg tgggcaggac ggagatgcca cagtggatgc cactgctgcc acagcctcct
                                                                      660
geggaeteca ggaaggaage etggetetea gecatgeagg atggaaagaa agattetatt
                                                                      720
```

<210> 5715

```
ccaggaggg agctgccctg gaacgccca aggacagcca ggacccactg ttcattcagg 780 attcccgcat tttctcctac gggagctaac gcctgtgcct gggtcctggc agcgctctgg 840 actccacact ctcctctgg gtttcacctt tgtaacagga tccctgcaga ccacgcccac 900 gacaaacact gtctccagag ggcaggacaa aggaagggca cggcgcggg cggtggtgtg 960 gttgcccatc aggaagaggc cgacttcttc cagtgaaact ggcagacag aaggcagtga 1020 gaaatg
```

```
<211> 6521
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (164)...(4670)
<223> similar to gi2370202 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5715 agtgtggtgg aattcgctgg agctggtgct gaaaaagggg gtttgcagag gctgccctgg 60 ggctggtgct gaaagaagag cccacagctg acttcatggt gctacaataa cctcaqaatc 120 tacttttcac tctcaggaga acccacatgt ctaatattta gacatgatgg caaactgggc 180 ggaagcaaga cctctcctca ttcttattgt tttattaggg caatttgtct caataaaagc 240 ccaggaagaa gacgaggatg aaggatatgg tgaagaaata gcctgcactc agaatggcca 300 gatgtactta aacagggaca tttggaaacc tgccccttgt cagatctgtg tctgtgacaa 360 tggagccatt ctctgtgaca agatagaatg ccaggatgtg ctggactgtg ccgacctgt 420 aacgccccct ggggaatgct gtcctgtctg ttcacaaaca cctggaggtg gcaatacaaa 480 ttttggtaga ggaaaaaagg gacaaaaggg agaaccagga ttagtgcctg ttgtaacagg 540 catacgtggt cgtccaggac cggcaggacc tccaggatca cagggaccaa gaggagagcg 600 agggccaaaa ggaagacctg gccctcgtgg acctcaggga attgatggag aaccaggtgt 660 tectggteaa cetggtgete caggacetee tggacateeg teccacecaq qaeeeqatgg 720 cttgagcagg ccgttttcag ctcaaatggc tgggttggat gaaaaatctg gacttgggag 780 tcaagtagga ctaatgcctg gctctgtggg tcctgttggc ccaaggggac cacagggttt 840 acaaggacag caaggtggtg caggacctac aggacctcct ggtgaacctg gtgatcctgg 900 accaatgggt ccgattggtt cacgtggacc agagggccct cctggtaaac ctggggaaga 960 tggtgaacct ggcagaaatg gaaatcctgg tgaagtggga tttgcaggat ctccgggagc 1020 tegtggattt cetggggete etggtettee aggtetgaag ggteacegag gacacaaagg 1080 tcttgaaggc cctaaaggtg aagttggagc acctggttcc aagggtgaag ctggcccac 1140 tggtccaatg ggtgccatgg gtcctctggg tccgagggga atgccaggag agagagggag 1200 acttgggcca cagggtgctc ctggacaacg aggtgcacat ggtatgcctg gaaaacctgg 1260 accaatgggt cctcttggga taccaggctc ttctggtttt ccaggaaatc ctggaatgaa 1320 gggagaagca ggtcctacag gggcgcgagg ccctgaaggt cctcaggggc agagaggtga 1380 aactgggccc ccaggtccag ttggctctcc aggtcttcct ggtgcaatag gaactgatgg 1440 tacteetggt cecaaaggee caaegggete teegggtace tetggteete etggeteage 1500 agggcctcct ggatctccag gacctcaggg tagcactggt cctcagggaa ttcgaggcca 1560 accggtgatc ccaggagttc caggtttcaa aggagaagct ggcccaaaag gggaaccagg 1620 gccacatggt attcagggtc cgataggccc acccggtgaa gaaggcaaaa gaggtcccag 1680 aggtgaccca ggaacagttg gtcctccagg gccagtqqga gaaaqgqqtq ctcctqqcaa 1740 tcgtggtttt ccaggctctg atggtttacc tgggccaaag ggtgctcaag gagaacgggg 1800 teetgtaggt tetteaggae ceaaaggaag ceagggggat ceaggaegte caggggaace 1860

tgggcttcca ggtgctcggg gtttgacagg aaatcctggt gttcaaggtc ctgaaggaaa 1920 acttggacct ttgggtgcgc caggggaaga tggccgtcca ggtcctccag gctccatagg 1980 aatcagaggg cagcccggga gcatgggcct tccaggcccc aaaggtagca gtggtgaccc 2040 tgggaaacct ggagaagcag gaaatgctgg agttcctggg cagaggggag ctcctggaaa 2100 agatggtgaa gttggtcctt ctggtcctgt gggcccgccg ggtctagctg gtgaaagagg 2160 agaacaagga cctccaggcc ccacaggttt tcaggggctt cctggtcctc cagggcctcc 2220 tggagaaggt ggaaaaccag gtgatcaagg tgttcctgga gatcccggag cagttggccc 2280 gttaggacct agaggagaac gaggaaatcc tggggaaaga ggagaacctg ggataactgg 2340 actccctggt gagaagggaa tggctggagg acatggtcct gatggcccaa aaggcagtcc 2400 aggtccatct gggacccctg gagatacagg cccaccaggt cttcaaggta tgccgggaga 2460 aagaggaatt gcaggaactc ctggccccaa gggtgacaga ggtggcatag gagaaaaagg 2520 tgctgaaggc acagctggaa atgatggtgc aagaggtett ecaggteett tgggeeetee 2580 aggtccggca ggtcctactg gagaaaaggg tgaacctggt cctcgaggtt tagttggccc 2640 tectggetee eggggeaate etggtteteg aggtgaaaat gggeeaaetg gagetgttgg 2700 ttttgccgga ccccagggtc ctgacggaca gcctggagta aaaggtgaac ctggagagcc 2760 aggacagaag ggagatgetg gtteteetgg accacaaggt ttageaggat eccetggeee 2820 tcatggtcct aatggtgttc ctggactaaa aggtggtcga ggaacccaag gtccgcctgg 2880 tgctacagga tttcctggtt ctgcgggcag agttggacct ccaggccctg ctggagctcc 2940 aggacetgeg ggacecetag gggaaceegg gaaggaggga cetecaggte ttegtgggga 3000 ccctggctct catgggcgtg tgggagatcg aggaccagct ggccccctg gtggcccagg 3060 agacaaaggg gacccaggag aagatgggca acctggtcca gatggccccc ctggtccagc 3120 tggaacgacc gggcagagag gaattgttgg catgcctggg caacgtggag agagaggcat 3180 gcccggccta ccaggcccag cgggaacacc aggaaaagta ggaccaactg gtgcaacagg 3240 agataaaggt ccacctggac ctgtggggcc cccaggctcc aatggtcctg taggggaacc 3300 tggaccaaaa ggtccagctg gcaatgatgg taccccagga cgggatggtg ctgttggaga 3360 acgtggtgat cgtggagacc ctgggcctgc aggtctgcca ggctctcagg gtgcccctgg 3420 aactcctggc cctgtgggtg ctccaggaga tgcaggacaa agaggagatc cgggttctcg 3480 gggtcctata ggaccacctg ggtcgagctg gaaaacgtgg attacctgga ccccaaggac 3540 ctcgtggtga caaaggtgat catggagacc gaggcgacag aggtcagaag ggccacagag 3600 gctttactgg tcttcagggt cttcctggcc ctcctggtcc aaatggtgaa caaggaagtg 3660 ctggaatccc tggaccattt ggcccaagag gtcctccagg cccagttggt ccttcaggta 3720 aagaaggaaa ccctgggcca cttgggccaa ttggacctcc aggtgtacga ggcagtgtag 3780 gagaagcagg acctgagggc cetectggtg agectggeec acctggeect eegggteece 3840 ctggccacct tacagetgct cttggggata tcatggggca ctatgatgaa agcatgccag 3900 atccacttcc tgagtttact gaagatcagg cggctcctga tgacaaaaac aaaacggacc 3960 caggggttca tgctaccctg aagtcactca gtagtcagat tgaaaccatg cgcagccccg 4020 atggctcgaa aaagcaccca gcccgcacgt gtgatgacct aaagctttgc cattccgcaa 4080 agcagagtgg tgaatactgg attgatccta accaaggatc tgttgaagat gcaatcaaag 4140 tttactgcaa catggaaaca ggagaaacat gtatttcagc aaacccattc cagtgtaccc 4200 acgtaaaaac cactggtagg ccagtaaatt ttcctgacaa taaacctgtt tggtatggtc 4260 ttgatatgaa cagagggtct cagttcgctt atggagacca ccaatcacct aatacagcca 4320 ttactcagat gacttttttg cgccttttat caaaagaagc ctcccagaac atcacttaca 4380 tctgtaaaaa cagtgtagga tacatggacg atcaagctaa gaacctcaaa aaagctgtgg 4440 ttctcaaagg ggcaaatgac ttagatatca aagcagaggg aaatattaga ttccggtata 4500 tegttettea agacaettge tetaagegga atggaaatgt gggeaagaet gtetttgaat 4560 atagaacaca gaatgtggca cgcttgccca tcatagatct tgctcctgtg gatgttggcg 4620 gcacagacca ggaattcggc gttgaaattg ggccagtttg ttttgtgtaa agtaagccaa 4680 gccaagacac atcgacaatg agcaccacca tcaatgacca ccgccattca caagaacttt 4740 gactgtttga agttgatcct gagactcttg aagtaatggc tgatcctgca tcagcattgt 4800 atatatggtc ttaagtgcct ggcctcctta tccttcagaa tatttatttt acttacaatc 4860 ctcaagtttt aattgatttt aaatattttt caatacaaca gtttaggttt aagatgacca 4920 atgacaatga ccacctttgc agaaagtaaa ctgattgaat aaataaatct ccgttttctt 4980 caatttattt cagtgtaatg aaaaaggtgg cttagtattt atgaggaaat tcttcttcct 5040 ggcaggtagc ttaaagagtg gggtatacag agccacaaca catgtttatt ttgcttggct 5100 gcagttgaaa aatagaaatt agtgcccttt tgtgacctct cattccaaga ttgtcaatta 5160 aaaatgagtt taaaatgttt aacttgtgat cgagacctac atgcatgtct tgatattgtg 5220 taactataat agagactctt taaggagaat cttaaaaaaa aaaaaaacgt ttctcactgt 5280

```
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catatagaac tttacaaaca tatgtccaag gactctaaat tgagactctt ccacatgtac
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caccaattat cactgcctct gcccttaaaa atgtcagagt agtattattg ataaaaaggg
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```

```
<210> 5716

<211> 4188

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1803)...(1580)

<223> similar to gi504529 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
gtgaattggg tgggcagaga caactgaaag ccacaggacc cggttggcac ctttttggcc
                                                                      180
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                                                                      240
ttccgggcgc agaagcaccc gacccacgct ggaggaaacg gtccctctgg gcaggagaag
                                                                      300
etttgggeet ggetggagea caeteaegga accaegeeaa egeetggeet gtageeaget
                                                                      360
eccacetece eteccacett etaaaatget tgeggatete aegtggeega eectaaceaq
                                                                      420
atacacatgg ggaaaggaat caggtggcac acataccgcc tttactccat agagaacttc
                                                                      480
caattgtggg taagaacaaa gccccacctc tgcctaatag atgcagtttt ccacctgcag
                                                                      540
ccaaaaagac aacctgttat tagctttttt cccagaggac aggcatctct atgaaactgc
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cattgcaaaa tttgccgaca gtgagataac cagctccatt ttgcttctaa cctccatgcc
                                                                      660
ctccttgttt actgctgcac gcaggttgaa ctgtgggagg aacttagttt aaaacaaaga
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tgataacagc cctttcccaa aggaaacctt tcctggggat tagcctgctt ttgtgggacc
                                                                      780
aacagattag ccacaagatt agaaactacg gttgaagagt cacgcagcgg gaggctacag
                                                                      840
gattctgacc ctccccaaac tgctcctggc gataacatca ccatcgtaaa gcctaagatc
                                                                      900
agcacttggt gggtcacctg gcaccaccca ggctcatctg atgttgtggc acccaggaac
                                                                      960
```

```
tgactcagtg cgaaaacagc ttcgactccc tgtgatttca tctctgacct gaccaatggg
                                                                     1020
tacttctgac tcactggctg ccccccaccc accagcttat ctttaaaaac tccaaacccc
                                                                     1080
agatgeteag ggagacegag taataataaa aetecagtet eecacacage tagetetgeg
                                                                     1140
tgaattacct tttctctgtt gcaaatgccc tttcttgata aattggctgt ctaggtaaca
                                                                     1200
gggaaggtga acccactggg cagttacact tttatccacc cttccaqctq qatcacqcqc
                                                                     1260
cctcttcaat gacatgacac gcagctagga gtgtatgagc ttgctggccg gcaccttccg
                                                                     1320
tcctgggatc gcataggcaa ggcctcaatg gacagccagg gtgcctgggt ccggttccca
                                                                     1380
ctttttttc tgtcctgttc tcgtttcctc tttgcttggg ccaaagaggg ttgggccagg
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gtcctgagtg caagggcttg gcttggtgaa ttaaagtggc agtagccgtg tggcagagaa
                                                                     1500
aatttgtaga tgggtgaaat cctgggccta cacagtgaca aagtgtatat agacagccag
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cctagttggt ggatgtgaca accccagact cttctagatt tgtggatccg tgcacctgcc
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ctcatctcca agetgetggc ttcagcccag ctgccaccag cgctgtctct gtcttgcqct
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gtaactgcct ctcacactga ggatggctca tgctctggtc cagccatggc ttgaacacct
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tctggttaat ccttacatct caccacggtc accgtggcta gatgtgacct ccgcgatgct
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cttgaccccg gccttctttc ctgggatgcc ggctaaggac acaagttcag tgtttgccct
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ggcttgtagc ccagcggggg ctccgtcatc ccctggggaa tgcctcggcc tgcaagaccg
                                                                     2220
cataccgcat tggaacaggg aaaccaccta cttcagcacc tccctcagca aggtggcagg
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ggagaacccc agcacccaga agcatccact gaaggacgta agtaggacaa ggccaactgt
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ggctgttcca gcagagggac tgtgggtgat gtttcccttc tctgatttct aaaatatctg
                                                                     2700
caaacttgtt tcatttataa ttgaaaatat aatttgcata acaacagtaa attctacaca
                                                                     2760
tgaaggcaaa cgtccgtggt tgacagaaat tacactggcc agaatcccca gtccccatga
                                                                     2820
ggcttgtcca gacgcagtga accagtcgca gctgataaca cacagaccat tcccgatccc
                                                                     2880
agaggtgcat ttcaggattc attctatttc atcagagacg gggtcttcct gtgttgccca
                                                                     2940
ggctggtctc gaactcctgg gctgaagcaa tcttcctgcc ttggcctccc agagggttgg
                                                                     3000
aattgcagat gtgaggtact tctttgatag tgcctccatg catgcagaag atgacgtgga
                                                                     3060
gagctccgcg cggcacaggg caggaagctg gtgtgcactc tcatggatcc gaagccaaca
                                                                     3120
cacgcctctc aactgaggac tctgcccctc tggcattctt ccagccacca gccctggggg
                                                                     3180
ccaggagcca ctgagtgggt cacacagcct tagagggcaa cgagggcagg agctcgccct
                                                                     3240
ggcggtcccc atgcagacaa gagggtcact ggcttccttg ctttgctctt cctggacatc
                                                                     3300
ttcctcgaca ttcatctttc catcctacca agagcgtgga aaccacaggg catgaggaca
                                                                     3360
ggcggagaca acgctggacc atctcacagc cacatcaaga ggctgcccac atcagggctt
                                                                     3420
tctacgtggt tgcaaggaac acaaacctgt gtgctccatt tgcccactgg cactaggcct
                                                                     3480
cctgcccacc acccgcttct aggctattcg agccqcaqqa qctacaqqct qctaqaqaac
                                                                     3540
cctgcggcag gatgctgggc gcggttcagc ttttgccaqq qaqcaqcatq qqactqqqat
                                                                     3600
ttggaaggtg tacagtggct gcgggcttta gcaggaggag tgtctacagc accttctgct
                                                                     3660
cctccaggta acctagtgtt tttatcagta tccattttcc tgtgtggatc tcttctgctt
                                                                     3720
gaaacctgtc ctgcctattt ttcttccctg gaccctgact gatacactct taaaacgaga
                                                                     3780
aaagggtacc gatttataaa gttcgtgaat taaaaactac accagtcatg gaaactcaat
                                                                     3840
gacatcactc aaagaaaatt cacaactcta gccttgagtt agctccctca ataqtatgat
                                                                     3900
gaggtcatgc agatagaatc atacagttat taacaaaagt agttgatgtt aaccgagtaa
                                                                     3960
tcagttttat ctgtgttcct ttgagacaga gagagagagt gagaaagaga gcgtgagcaa
                                                                     4020
gtgagtgcac atactattgt taaagtcttc tctctaaagt tttaatatct gatataccat
                                                                     4080
aaacacccag ataaagaact ttagagaaac tggttaaaaa gatttaaaat tcccaactgt
                                                                     4140
aataaatccc taaaatgaat acccaaaaaa tgtttttaaa aaaaaaaa
                                                                     4188
```

```
<210> 5717
     <211> 728
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (530)...(179)
     <223> similar to gi1330342 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5717
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                                                                       60
gtcagcagtc cacatctctg cgtccccct ccccacgcat ccactcccct cacgccgtgg
                                                                      120
ggcaaaaagg agggtgctgg ttgcgcgcgg agagcgcggt atgggtggcg aagtcccagc
                                                                      180
ctctacctag ccccgcgcta gtcgtgggtt ccctccagcc acccctctqq cccttcattc
                                                                      240
eggteeetee ceagaeggge ceteeteett teteatggae eeceaagagg eetetegegt
                                                                      300
tetececega aggaceceta tgeetageea tggateetee attececace etecegtttt
                                                                      360
cccgtcccgc agacggagcc ggtccccagc cgccgccagt ctccggcctc ggatgttgac
                                                                      420
acaaacccga ggcggtttac actgagcggg tctggaagct ttcagggccc cggcaacacc
                                                                      480
tecteceege acttgggggt eteceeacag eegggeegg eegeetggge tgeactggeg
                                                                      540
tctgagagct cctgacacaa ggctgtggga aggaaccctt ttaagccaaa ctgggggcaa
                                                                      600
aaggggagcc agacatcccc gggctgggcc acgtgcgggg cagggacttc taaggatctg
                                                                      660
tegaaagteg gggeggaegg etggggattg geetaategg agegeggaeg etgaagagea
                                                                      720
gcggtgga
                                                                      728
     <210> 5718
     <211> 2892
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2481)...(452)
     <223> similar to gi758066 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5718
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                                                                       60
cacgtaaacc acaaaagagt agcattccat tttcttgaag tgcacatgat attatgaaca
                                                                      120
atacaaatgc attattttta tcattaatag tttaatcatt aattatctca taagtcaatg
                                                                      180
cagagagtga aattactatg aattaaactt ctgttcacaa tgtacagtat tttqcatatg
                                                                      240
ttgactttac ttaattgtac atttttgttt ccaaagttaa tgttaaatac ctggtgcata
                                                                      300
ggttgttgtc aagcaattac tctcattgtc ttgtcataca tgctaacatt ttgctaaata
                                                                      360
taaatctaca agtatcacag ctgcatatat ttctgaagtg gttagaacag aggaggatgc
                                                                      420
```

```
tggaaagttg agttctttaa aatcttcgtt caaaacaaga gattttcatc tatgtcctct
                                                                      480
tctttaattc caaagcagtg gccccactcc ttcagggtga tgtgcttatc cttgttgggg
                                                                      540
tcacactcct caaagaaacg ggttatgcag tgttccatgg gcaccagaga tgctcgcaga
                                                                      600
ggagcaagtt cagaatgtgt caagactcta tccatagggt gttggtcaag ttcactaaac
                                                                      660
tgccagtgca caggatacac atacatgtgg tagtttttct taaagtccct taaqaqaaqa
                                                                      720
tcaatgggat ggtccccagc caaaagcctc ttttcatccc aggtaaattt tcttqacttt
                                                                      780
atttctctgg cttctcattt agataaccag catgttcaga gttggcttca taaagctgca
                                                                      840
tgaggatatt cttgagccca gtctctcatc cgtagaggaa acttgaatca cttcaaagtc
                                                                      900
ccgacaaagt aggaatagat ttggaggctt ccaaaataat ccagctggag ttgatgccc
                                                                      960
tttttggtcc cctccagtct gcatttagta gcgaatagat gacaggaact agcataggtc
                                                                     1020
tgattgtcag tgccgcaaac ttgatcaagg ggttttgttg gaggaccaag tcactqqatc
                                                                     1080
ctggcaagac acaagtgagg tttttccctg ttggtctgcc ttacagatgt ggcctctttt
                                                                     1140
acactggaag ctcatgcaag aatccacagc atqcaccct catgttqcct tcacttqacq
                                                                     1200
tttcctcctc atttgatgag ttctctgctt tcttggcctc ttggtgctct ccaggctcag
                                                                     1260
tggtacctat attttcattt tcatgtactt tttctctttg ctccctcaat tttgaaggtg
                                                                     1320
aataggcaat ggaatgaagc tctctcggcc tcccagaaaa ggcctggctt gggatgaaag
                                                                     1380
tagtcatcac tttgcactgt gcctggggcc atcagtgccg ccatcatcgc catcatcatc
                                                                     1440
gccatcatca tcaactccat gatttctggg cgtggtatta ccatcatcag taggttccat
                                                                     1500
gagcagagcc tcagaaacag tcttttcttc tgtctctttg tggttgctga tagcttctag
                                                                     1560
gccagtttta ccctcttgac tctgccattc agtttcttga atgtgcttat tgacgttcga
                                                                     1620
tgcattttcc tcttccattt ctgcattgga gttatcttct tgttcttggt taccctgatc
                                                                     1680
aaattcatcc tcctgcatct tgcttacttg agttggttga tcagactctt ccaaaatatc
                                                                     1740
atcagattgg gtattgtctt cctcctgctt gctgttagca tgctccctgg gcaatttctg
                                                                     1800
tctttctttc ttggttatca ttgtgggtac caacttcacc tggctctttt tcttcttcct
                                                                     1860
cttctccatt ggaaatattt ggatcctgct cttggtttcc ttgatccctt aggccttggc
                                                                     1920
tatgtttact gctcctgttc aactgatgat gtgaataatt tctaggttgt tcttggtttt
                                                                     1980
cctctcttt tgtgatactt tcttgttggt tagaatctgt gaaggaacta acaccaggag
                                                                     2040
ccaaaaaatc agtgttctct gagagttttt tctcctgagg ctcactcata tcttctttta
                                                                     2100
tgtccaatgt accettcaag ttggtgccat actcccaaat tccacactta aagtgaccca
                                                                     2160
teactgtece tettgaatee tteaateece agetettgge etagaactet tgeecetgtt
                                                                     2220
ctgctgactg ttcatggctt tcctcttttg actttagtac tgatgatttt tcagccttat
                                                                     2280
ggtgggaatc gtcttctgtg gatactgctg tttctttttc attttcttca gcttcagccc
                                                                     2340
ttaaactggg gattgcagtg ttgtcgggtg ctaccgtttc agcagttggt ttggaatgat
                                                                     2400
cagataataa tottgcattt gtcgggattg cagctgcagt toccaagaga cataggaaaa
                                                                     2460
aaagcccagt cttcatgctt tccagatctt taagtaaggg gctggaccca gagccactgc
                                                                    2520
agaaaaattg aagttgaatc ccctctgcac acagacaggg aataaaagtt tgacaaacac
                                                                     2580
ccaagaaaaa ctctttaaat ccctttcctc gttagctctg cttctttgcc cagaggcata
                                                                     2640
ttcaagtcta ctggagttga aattctgctg ctctgtcaac tagtgggggt ctgaagtgac
                                                                     2700
agacgagaat ttggaggttg gcaccagaga gtatttcaga ctgtcatcgt ttttgttgca
                                                                     2760
gattcctgga tttccctagc aggctggcct ctcatgcgag ggctttacag gcagtgcttg
                                                                     2820
caaaccaaaa gggaaagagc taattctggt ggcgtggatg gggttaacag tcttcccccg
                                                                     2880
gacgcgtggg tc
                                                                     2892
```

```
<210> 5719
<211> 1692
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1)...(1693)
```

<223> n = a,t,c or g

```
<220>
<221> misc_feature
<222> (1550)...(563)
<223> similar to gi4584796 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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<400> 5719
ttttttatca ttgacaatgt ttattatcaa gaaactttag gttttttaaa agaatgctcq
                                                                       60
ttttagaata caccaagagg acactctgtg acaggacata tacaaacaag gataattaaa
                                                                      120
atattaaata ctatctaaat taaaagacca taattcaaat tgctaattat aatatttgtg
                                                                      180
teggtagaaa taactatagt teeeetteat gaaatteace eecaegttet catgaagaet
                                                                      240
atgacgtctc accacaattt cagttattta atttacaata atcaatgctg agttttctgt
                                                                      300
gctgaagcat gcactgttac agaaagcaca aaatcctatt tacagggatt tttagttttc
                                                                      360
tttaaaatgt atctcaagca tcttttaaag tgcgagctac aaataggttg tatccttaat
                                                                      420
gaaaaaggct tctttctaaa agaagtatqq agataqqcta tccaatactq cnqqcaqqaa
                                                                      480
cagttatata actaaccgaa ggaaccaqca qcactctqct aactctqttt tagtqtaqca
                                                                      540
acctccttct tggtgttcta ctaccagcca aacatgtact ccattgcttt ggatacaaga
                                                                      600
ctttcatctt tttttggcgt ttgtctgtca gaaataacct gataatcact agtagaggct
                                                                      660
ttgtatgctg tagcaagagg tctcatggta gaaatcctag gagtacttcc aggttgtgtt
                                                                      720
qqtqtaccta gagttttgat tggtggtgta aaggctaaag atggagatga taaagcacat
                                                                      780
ctgtcactgc tttccataac acttttgtca atacatggtt ttacaccaat catgatggat
                                                                      840
tctccaaaaa tcctcccatc tttgcttaag gctttccgag cctgcagttt agattgataa
                                                                      900
cgaatatgca tccaatttcc tgtattagac atccacatgt tttaagatat tcccccatac
                                                                      960
tgtgcaaatt gtaagtaata tgtaggaaag cagatgcctt gaggaaaccc caaatacagt
                                                                     1020
caccccaaga gtcatcgagg gtgatcttct gaagtcaaag aatctccttg agtataaaaa
                                                                     1080
ggatccaact gggcaggaga taatgtcgtc tttcgtggct gaccgatact tgctggacta
                                                                     1140
aacatacttt gccctgttcc aggagtagat gtaactccaa caagaggact ctgcattact
                                                                     1200
gaaatgtttg gctgtcttct tgaagttaaa ggtgttgatc caagtcctgg gctagaaatg
                                                                     1260
tcatcatata tacttctaac tggtggagcg ccacttttat ctttatgagc tggtacaact
                                                                     1320
ggttgtggtg gtgacccacc tgcaagtaaa ggtgatctca tttccattac tcctactgaa
                                                                     1380
gggccactaa ttgatcgagg ttgtggagtc accggagctg gcaaatcccc cattaaaaat
                                                                     1440
ccaggtaaga actgggcatt aactcctggc tttggagatg tgggtgaacc cagcatcatt
                                                                     1500
ggttcagatc ctaacgcggg cccctgaggt tccactgcaa aggctgccat tgcgtcggca
                                                                     1560
actacactta aaaccagtac cttcccaatt aattttcaaa aatggcggaa accggacgcg
                                                                     1620
tgggcggacg cgtgggcgga cgcgtgggtc gttccagggt tatcagtcgg tacqcaqqct
                                                                     1680
ttcagtggca ag
                                                                     1692
```

```
<210> 5720

<211> 3593

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3594)

<223> n = a,t,c or g

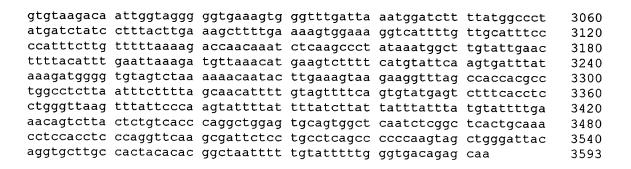
<220>

<221> misc_feature

<222> (1)...(3593)
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<223> similar to gi38458 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5720 acgccgccgc ctgtgtcatc cgccattttg tgagaagcaa ggcggcctcc acgtttcctg 60 agcgtcttct tcgcttttgc ctcgaccgcc ccttgaccac agacatgtct cgggatcggt 120 tccggagtcg tggcggtggc ggtggtggct tccacaggcg tggaggaggc ggcggccgcg 180 gcggcctcca cgacttccgt tctccgccgc ccggcatggg cctcaatcag aatcgcggcc 240 ccatgggtcc tggcccgggc cagagcggcc ctaagcctcc gatcccgcca ccqcctccac 300 accaacagca agcaacaagc caccaccgca agcagccacc gccgcagcag ccggccaccg 360 catcagcccg ccgccgcatc cacaagcncg catcagcagc agcagccgcc gccaccqccq 420 caggactett ccaageeegt cgttgeteag ggaceeggee eegeteeegg agtaggeage 480 gcaccaccag cctccagctc ggccccgccc gccactccac caacctcggg ggccccgcca 540 gggtccgggc caggcccgac tccgaccccg ccgcctgcag tcacctcggc ccctcccqqq 600 gegeegecae ceaeceegee aageageggg gteeetaeca caecteetea ggeeggagge 660 ccgccgcctc cgcccgcggc agtcccgggc ccgggtccag ggcctaagca gggcccaggt 720 ccgggtggtc ccaaaggcgg caaaatgcct ggcgggccga agccaggtgg cggcccgggc 780 ctaagtacgc ctggcggcca ccccaagccg ccgcatcgaq qcqcqqqqa qccccqcqqq 840 ggccgccagc accacccgcc ctaccaccag cagcatcacc aggggccccc gcccggcgg 900 cccggcggcc gcagcgagga gaagatctcg ggacctcgga gggggtttaa agccaatttg 960 tetetettga ggaggeetgg agagaaaaet tacacacage gatgteggtt ttgtttgttg 1020 ggaatctacc tgctgatatc acggaggatg aattcaagaa gactatttgc taaaatatgg 1080 gagaaccagg agaagttttt atcaacaaag gcaaaggatt cggaatttat taaqcttgaa 1140 tctagagctt tggcttgaaa ttgcccaaag cccgaactgg gatgatacac cccatgagga 1200 ggtagacage tteegagtte gettttteee acacatgeet geetgeeest tteetgttee 1260 gtaatetttt caccetttat gttteeceaa tgaaactgtt ggggaaggaa geeetttagg 1320 cccaatttgg gtccccattt gaaaggggct gtttgtaata ggtgggatga tccgtgggaa 1380 ggtcctacag ggaaaggcca ttgtttgaat tttgcttcct aagcccagcc agcaaacaaa 1440 ggcattttgg aacgatgcca gtgaaaggtg tttttcttta cttgacggac aactccctcg 1500 tcccagtcat tggtggaacc cacttggaac caactagatg attgaagatg ggtcttcctt 1560 qaaaaacttq ccccagaaag aaatccaatg tatcaaaaag gggagagaaa cccctcctcg 1620 gtttttgccc cagcatggca ccgtttgagt acqaatattc tcaqcqqatq aagtcctttg 1680 gatgaaatgg aaaaacagca aagggaacaa qttqaaaaaa acatgaaaga tqcaaaagac 1740 aaattggaaa gtgaaatgga agatgcctat catgaacatc aggcaaatct tttgcgccca 1800 agatctgatg agacgacagg aagaatttaa gacgcctgga agaacttcac catccagaaa 1860 tgcagaaacg taaagaaatg caattgaggc aagaggagga acgaccgtag aagagaggaa 1920 gagatgatga ttcgtcaacg tgagatggaa gaacaaatga ggcgccaaag agaggaaagt 1980 ttacagccgg aattgggcta ccttggatcc cacggggaan agagacatgc gaatggggtg 2040 gcggaggagc aatgaacatg gggagattcc tatggttcca ggaggccaga attttccacc 2100 tcctaggagg tggtgggtgg cataggttat tgaagctaat cctgggcgtt ccaccagcaa 2160 ccatgagttg ttcccatgat ggggaagttg acatgcgtac tgagccgctt tggacagggg 2220 aggtncgggg ccttgtgggt gaacaggtcc ctagagggaa tggggcctgg gaacttccca 2280 gcaagaatat gggtagaagg gagagaagga gtccgaaggc cccaaacaaa aaaaccccga 2340 ttttagatgt gatatttagg ctttcattcc aggtttgttt tgtttttttg tttagatacc 2400 aatcttttaa attcttgcat tttagtaaag aaagctatct ttttatggat gttagccagt 2460 ttattgacct actatttgta aaatggtctg tttgggcagg taaaattatt gttattgcag 2520 tttttggacc aggggaattt ttttttcctt tttatttctt taatttttcc ttttttactg 2580 taataatgtc cctcaagttt atgggcagtg taccttgtgc cactgaattt ccaaagtgta 2640 ccaatttttt tttttttac tgtgcttcaa ataaatagaa aaataggtta taatattgat 2700 cttcaacttt gccattcatg cttctatgca tattaggcta cgtattccac attgaaagca 2760 tgagagtgtc taggcctttg aatggcatat gccatttctg ggaaatgcat ctggaggcta 2820 agtattgctt tctacaaata attgccccct ttgttttaaa aagaagaaat gcatattgaa 2880 gtagtttgat gatttgtttg gcatatagga agcacgctgg tgctaagtat tttttaaatg 2940 gttatgtaag caaagctgaa ctgtaaatct tcaggaatat gtattaagat tgtggaatgg 3000



```
<210> 5721
<211> 9654
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (50)...(9391)
<223> similar to gil661108 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5721 cagcgactee tetggeteec gagaagtgga teeggtegeg gecactaega tgeegggage 60 egeeggggte etecteette tgetgetete eggaggeete gggggegtae aqqeqeaqeq 120 gccgcagcag cagcggcagt cacaggcaca tcagcaaaga ggtttattcc ctgctgtcct 180 gaatcttgct tctaatgctc ttatcacgac caatgcaaca tgtggagaaa aaggacctga 240 aatgtactgc aaattggtag aacatgtccc tgggcagcct gtgaggaacc cgcagtgtcg 300 aatctgcaat caaaacagca gcaatccaaa ccagagacac ccgattacaa atgctattga 360 tggaaagaac acttggtggc agagtcccag tattaagaat ggaatcgaat accattatgt 420 gacaattaca ctggatttac agcaggcgtt ccagatcgcg tatgtgattg tgaaggcagc 480 taactccccc cggcctggaa actggatttt ggaacqctct cttqatqatq ttqaatacaa 540 gccctggcag taacatggct gttacagaac acggaagccc taacgcctta accaaattaa 600 tecceggaat tggggeaceg teaaaatgee caagattgag taggteatet geactteatt 660 ttactccaag atacacccct tagaaaatgg agagattcac atctctttaa tcaatgggag 720 accaagtgcc gatgatcctt ctccagaact gctagaattt acctccgctc gctatattcg 780 cctgagattt cagaggatcc gcacactgaa tgctgacttg atgatgtttg ctcacaaaqa 840 cccaagagaa attgacccca ttgtcaccag aagatattac tactcggtca aggatatttc 900 agttggaggg atgtgcatct gctatggtca tgccagggct tgtccacttg atccagcgac 960 aaataaatct cgctgtgagt gtgagcataa cacatgtggc gatagctgtg atcagtgctg 1020 tccaggattc catcagaaac cctggagagc tggaactttt ctaactaaaa ctgaatggga 1080 agcatgcaat tgtcatggaa aagctgaaga atgctattat gatgaaaatg ttgccagaag 1140 aaatctgagt ttgaatatac gtggaaagta cattggaggg ggtgtctgca ttaattgtac 1200 ccaaaacact gctggtataa actgcgagac atgtactgaa ggcttcttca gacccaaagg 1260 ggtatctcca aattatccaa ggccatgcca gccatgtcat tgcgatccaa ttggttcctt 1320 aaatgaagtc tgtgtcaagg atgagaaaca tgctcgacga ggtttggcac ctggatcctg 1380 tcattgcaaa actggttttg gaggtgtgag ctgtgatcgg tgtgccaggg gctacactgg 1440 ctacccggac tgcaaagcct gtaactgcag tgggttaggg agcaaaaatg aggatccttg 1500 ttttggcccc tgtatctgca aggaaaatgt tgaaggagga gactgtagtc gttgcaaatc 1560 eggettette aatttgeaag aggataattg gaaaggetge gatgaqtqtt tetqtteaqq 1620

ggtttcaaac agatgtcaga gttcctactg gacctatggc aaaatacaag atatgagtgg 1680 ctggtatctg actgaccttc ctggccgcat tcgagtggct ccccagcagg acgacttgga 1740 ctcacctcag cagatcagca tcagtaacgc ggaggcccgg caagccctgc cgcacagcta 1800 ctactggagc gcgccgcgtc cctatctggg aaacaaactc ccagcagtag gaggacagtt 1860 gacatttacc atatcatatg accttgaaga agaggaagaa gatacagaac gtgttctcca 1920 gcttatgatt atcttagagg gtaatgactt gagcatcagc acagcccaag atgaggtgta 1980 cctgcaccca tctgaagaac atactaatgt attgttactt aaagaagaat catttaccat 2040 acatggcaca cattttccag tccgtagaaa ggaatttatg acagtgcttg cgaatttgaa 2100 gagagteete etacaaatea catacagett tgggatggat gecatettea ggttgagete 2160 tgttaacctt gaatccgctg tctcctatcc tactgatgga agcattgcag cagctgtaga 2220 agtgtgtcag tgcccaccag ggtatactgg ctcctcttgt gaatcttgtt ggcctaggca 2280 caggcgagtt aacggcacta tttttggtgg catctgtgac ccatgtcagt gctttggtca 2340 tgcggagtcc tgtgatgacg tcactggaga atgcctgaac tgtaaggatc acacaggtgg 2400 cccatattgt gataaatgtc ttcctggttt ctatggcgag cctactaaag gaacctctga 2460 agactgtcaa ccctgtgcct gtccactcaa tatcccatcc aataacttta gcccaacgtg 2520 ccatttagac cggagtcttg gattgatctg tgatggatgc cctgtcgggt acacaggacc 2580 acgctgtgag aggtgtgcag aaggctattt tggacaaccc tctgtacctg gaggatcatg 2640 tcagccatgc caatgcaatg acaaccttga cttctccatc cctggcagct gtgacagctt 2700 gtctggctcc tgtctgatat gtaaaccagg tacaacaggc cggtactgtg agctctqtqc 2760 tgatggatat tttggagatg cagttgatgc gaagaactgt cagccctgtc gctgtaatgc 2820 cggtggctct ttctctgagg tttgccacag tcagactgga cagtgtgagt gcagagccaa 2880 cgttcagggt cagagatgtg acaaatgcaa ggctgggacc tttggcctac aatcagcaag 2940 gggctgtgtt ccctgcaact gcaattcttt tgggtctaag tcattcgact gtgaagagag 3000 tggacaatgt tggtgccaac ctggagtcac agggaagaaa tgtgaccgct gtgcccacgg 3060 ctatttcaac ttccaagaag gaggctgcac agcttgtgaa tgttctcatc tgggtaataa 3120 ttgtgaccca aagactgggc gatgcatttg cccacccaat accattggag agaaatgttc 3180 taaatgtgca cccaatacct ggggccacag cattaccact ggttgtaagg cttgtaactg 3240 cagcacagtg ggatccttgg atttccaatg caatgtaaat acaggccaat gcaactgtca 3300 tocaaaatto totggtgcaa aatgtacaga gtgcagtcga ggtcactgga actaccotcg 3360 ctgcaatctc tgtgactgct tcctccctgg gacagatgcc acaacctgtg attcagagac 3420 taaaaaatgc tcctgtagtg atcaaactgg gcagtgcact tgtaaggtga atgtggaagg 3480 catccactgt gacagatgcc ggcctggcaa attcggactc gatgccaaga atccacttgg 3540 ctgcagcagc tgctattgct tcggcactac tacccagtgc tctgaagcaa aaggactgat 3600 ccggacgtgg gtgactctga aggctgagca gaccattcta cccctggtag atgaggctct 3660 gcagcacacg accaccaagg gcattgttt tcaacatcca gagattgttg cccacatgga 3720 cctgatgaga gaagatctcc atttggaacc tttttattgg aaacttccag aacaatttga 3780 aggaaagaag ttgatggcct atgggggcaa actcaagtat gcaatctatt tcgaggctcg 3840 ggaagaaaca ggtttctcta catataatcc tcaagtgatc attcgaggtg ggacacctac 3900 tcatgctaga attatcgtca ggcatatggc tgctcctctg attggccaat tgacaaggca 3960 tgaaattgaa atgacagaga aagaatggaa atattatggg gatgatcctc gagtccatag 4020 aactgtgacc cgagaagact tcttggatat actatatgat attcattaca ttcttatcaa 4080 agctacttat ggaaatttca tgcgacaaag caggatttct gaaatctcaa tggaqgtaqc 4140 tgaacaagga cgtggaacaa caatgactcc tccagctgac ttgattgaaa aatgtgattg 4200 teceetggge tattetggee tgteetgtga ggeatgettg eegggatttt ategaetgeg 4260 ttctcaacca ggtggccgca cccctggacc aaccctgggc acctgtgttc catgtcaatg 4320 taatggacac agcagcctgt gtgaccctga aacatcgata tgccagaatt gtcaacatca 4380 cactgctggt gacttctgtg aacgatgtgc tcttggatac tatggaattg tcaagggatt 4440 gccaaatgac tgtcagcaat gtgcctgccc tctgatttct tccagtaaca atttcagccc 4500 ctcttgtgtc gcagaaggac ttgacgacta ccgctgcacg gcttgtccac ggggatatga 4560 aggccagtac tgtgaaaggt gtgcccctgg ctatactggc agtccaggca accctggagg 4620 ctcctgccaa gaatgtgagt gtgatcccta tggctcactg cctgtgccct gtgaccctgt 4680 cacaggattc tgcacgtgcc gacctggagc cacgggaagg aagtgtgacg gctgcaagca 4740 ctggcatgca cgcgagggct gggagtgtgt tttttgtgga gatgagtgca ctggccttct 4800 teteggtgae ttggetegee tggageagat ggteatgage ateaacetea etggteeget 4860 gcctgcgcca tataaaatgc tgtatggtct tgaaaatatg actcaggagc taaagcactt 4920 getgteacet cagegggeee cagagagget tatteagetg geagagggea atetgaatae 4980 actcgtgacc gaaatgaacg agctgctgac cagggctacc aaagtgacag cagatggcga 5040

gcagaccgga caggatgctg agaggaccaa cacaagagca aagtccctgg gagaattcat 5100 taaggagctt gcccgggatg cagaagctgt aaatgaaaaa gctataaaac taaatgaaac 5160 tctaggaact cgagacgagg cctttgagag aaatttggaa gggcttcaga aagagattga 5220 ccaqatgatt aaagaactga ggaggaaaaa tctagagaca caaaaggaaa ttgctgaaga 5280 tgagttggta gctgcagaag cccttctgaa aaaagtgaag aagctgtttg gagagtcccg 5340 gggggaaaat gaagaaatgg agaaggatct ccggggaaaaa ctggctgact acaaaaacaa 5400 agttgatgat gcttgggacc ttttgagaga agccacagat aaaatcagag aagctaatcg 5460 cctatttgca gtaaatcaga aaaacatgac tgcattggag aaaaagaagg aggctgttga 5520 gagcggcaaa cgacaaattg agaacacttt aaaagaaggc aatgacatac tcgatgaagc 5580 caaccgtctt gcagatgaaa tcaactccat catagactat gttgaagaca tccaaactaa 5640 attgccacct atgtctgagg agcttaatga taaaatagat gacctctccc aagaaataaa 5700 ggacaggaag cttgctgaga aggtgtccca ggctgagagc cacgcagctc agttgaatga 5760 ctcatctgct gtccttgatg gaatccttga tgaggctaaa aacatctcct tcaatgccac 5820 tgcagccttc aaagcttaca gcaatattaa ggactatatt gatgaagctg agaaagttgc 5880 caaagaagcc aaagatcttg cacatgaagc tacaaaactg gcaacaggtc ctcggggttt 5940 attaaaggaa gatgccaaag gctgtcttca gaaaagcttc aggattctta acgaagccaa 6000 gaagttagca aatgatgtaa aagaaaatga agaccatcta aatggcttaa aaaccaggat 6060 agaaaatgot gatgotagaa atggggatot ottgagaaot ttgaatgaca otttgggaaa 6120 gttatcaget attecaaatg atacagetge taaactgeaa getgttaagg acaaageeag 6180 acaagccaac gacacagcta aagatgtact ggcacagatt acagagctcc accagaacct 6240 cgatggcctg aagaagaatt acaataaact agcagacagc gtcgccaaaa cgaatgctgt 6300 ggttaaagat ccttccaaga acaaaatcat tgccgatgca gatgccactg tcaaaaattt 6360 agaacaggaa gctgaccggc taatagataa actcaaaccc atcaaggaac ttgaggataa 6420 cctaaagaaa aacatctctg agataaagga attgataaac caagctcgga aacaagccaa 6480 ttctatcaaa gtatctgtgt cttcaggagg tgactgcatt cgaacataca aaccagaaat 6540 caagaaagga agttacaata atattgttgt caacgtaaag acagctgttg ctgataacct 6600 cctcttttat cttggaagtg ccaaatttat tgactttctg gctatagaaa tgcgtaaagg 6660 caaagtcagc ttcctctggg atgttggatc tggagttgga cgtgtagagt acccagattt 6720 gactattgat gactcatatt ggtaccgtat cgtagcatca agaactggga gaaatggaac 6780 tatttctgtg agagccctgg atggacccaa agccagcatt gtgcccagca cacaccattc 6840 6900 tggcctgact gggaaattaa agaaggctga tgctgtacgt gtgattacat tcactggctg 6960 catgggagaa acatactttg acaacaaacc tataggtttg tggaatttcc gagaaaaaga 7020 aggtgactgc aaagggatgc actgtcagtc ctcaggtgga agatagtgag gggactattc 7080 aatttgatgg agaaggttat gccattggtc aagcccgtcc cattcgctgg taccccaaca 7140 tctccactgt catgttcaag ttcagaacat tttcttcgag tgctcttctg atgtatcttg 7200 ccacacgaga cctgagagat ttcatgagtg tggagctcac tgatgggcac ataaaagtca 7260 gttacgatct gggctcagga atggcttccg ttgtcagcaa tcaaaaccat aatgatggga 7320 aatggaaatc attcactctg tcaagaattc aaaaacaagc caatatatca attgtagata 7380 tagatactaa tcaggaggag aatatagcaa cttcgtcttc tggaaacaac tttggtcttg 7440 acttgaaagc agatgacaaa atatattttg gtggcctgcc aacgctgaga aacttgagta 7500 tgaaagcaag gccagaagta aatctgaaga aatattccgg ctgcctcaaa gatattgaaa 7560 tttcaagaac tccgtacaat atactcagta gtcccgatta tgttggtgtt accaaaggat 7620 gttccctgga gaatgtttac acagttagct ttcctaagcc tggttttgtg gagctctccc 7680 ctgtgccaat tgatgtagga acagaaatca acctgtcatt cagcaccaag aatgagtccg 7740 gcatcattct tttgggaagt ggagggacac cagcaccacc taggagaaaa cgaaggcaga 7800 ctggacaggc ctattatgta atactcctca acaggggccg tctggaagtg catctctcca 7860 caggggcacg aacaatgagg aaaattgtca tcagaccaga gccgaatctg tttcatgatg 7920 gaagagaaca ttccgttcat gtagagcgaa ctagaggcat ctttacagtt caagtggatg 7980 aaaacagaag atacatgcaa aacctgacag ttgaacagcc tatcgaagtt aaaaagcttt 8040 tcgttggggg tgctccacct gaatttcaac cttccccact cagaaatatt cctccttttg 8100 aaggctgcat atggaatctt gttattaact ctgtccccat ggactttgca aggcctgtgt 8160 ccttcaaaaa tgctgacatt ggtcgctgtg cccatcagaa actccgtgaa gatgaagatg 8220 gagcagctcc agctgaaata gttatccagc ctgagccagt tcccacccca gcctttccta 8280 egeceaecce agttetgaca catggteett gtgetgeaga ateagaaeca getettttga 8340 tagggagcaa gcagttcggg ctttcaagaa acagtcacat tgcaattgca tttgatgaca 8400 ccaaagttaa aaaccgtctc acaattgagt tggaagtaag aaccgaagct gaatccggct 8460

```
tgctttttta catggctcgc atcaatcatg ctgattttgc aacagttcag ctgagaaatg
                                                                     8520
gattgcccta cttcagctat gacttgggga gtggggacac ccacaccatg atccccacca
                                                                     8580
aaatcaatga tggccagtgg cacaagatta agataatgag aagtaagcaa gaaggaattc
                                                                     8640
tttatgtaga tggggcttcc aacagaacca tcagtcccaa aaaagccgac atcctggatg
                                                                     8700
tcgtgggaat gctgtatgtt ggtgggttac ccatcaacta cactacccga agaattggtc
                                                                     8760
cagtgaccta tagcattgat ggctgcgtca ggaatctcca catggcagag gcccctgccg
                                                                     8820
atctggaaca acccacctcc agcttccatg ttgggacatg ttttgcaaat gctcagaggg
                                                                     8880
gaacatattt tgacggaacc ggttttgcca aagcagttgg tggattcaaa gtgggattgg
                                                                     8940
accttcttgt agaatttgaa ttccgcacaa ctacaacgac tgqaqttctt ctggggatca
                                                                     9000
gtagtcaaaa aatggatgga atgggtattg aaatgattga tgaaaagttg atgtttcatg
                                                                     9060
tggacaatgg tgcgggcaga ttcactgctg tctatgatgc tggggttcca gggcatttgt
                                                                     9120
gtgatggaca atggcataaa gtcactgcca acaagatcaa acaccgcatt gagctcacag
                                                                     9180
tcgatgggaa ccaggtggaa gcccaaagcc caaacccagc atctacatca gctgacacaa
                                                                     9240
atgaccetgt gtttgttgga ggetteecag atgaceteaa geagtttgge etaacaacea
                                                                     9300
gtattccgtt ccgaggttgc atcagatccc tgaagctcac caaaqqcaca qqcaaqccac
                                                                     9360
tggaggttaa ttttgccaag gccctggaac tgagggggt tcaacctgta tcatgccag
                                                                     9420
ccaactaata aaaataagtg taaccccagg aagagtctgt caaaacaagt atatcaagta
                                                                     9480
aaacaaacaa atatatttta cctatatatg ttaattaaac taatttqtqc atqtacatag
                                                                     9540
aattotttot gtattoagat ggtgotaatt cagactocag actgaatttt aattoaagtt
                                                                     9600
ctttctcaag tctataaata atattaaact gattatttca ttctaaaaaa aaaa
                                                                     9654
```

```
<210> 5722
<211> 1639
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (18)...(1140)
<223> similar to gi403144 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5722 gcggtggaat tccgaggatg gccgtcatgg cgccccgaac cctcctcctg ctactctcgg 60 gggccctggc cctgacccag acctgggcgg gctcccactc catgaggtat ttctacacct 120 ccgtgtcccg gcccggccgc ggggagcccc gcttcatcgc cgtqqqctac gtqqacqaca 180 cgcagttcgt gcggttcgac agcgacgccg cgagccagag gatggagccg cgggcgccgt 240 ggatagagca ggaggggccg gagtattggg accaggagac acggaaagtg aaggcccagt 300 cacagactga ccgagtggac ctggggaccc tgcgcggcta ctacaaccag agcgaggccg 360 gttctcacac catccagagg atgtatggct gcgacgtggg gtcggactgg cgcttcctcc 420 gegggtacca ccagtacgee tacgacggca aggattacat egecetgaaa gaggacetge 480 gctcttggac cgcggcggac atggcagctc agaccaccaa gcacaagtgg gagacggccc 540 atgaggcgga gcagtggaga gcctacctgg agggcacgtg cgtggagtgg ctccgcagat 600 acctggagaa cgggaaggag acgctgcagc gcacggacgc ccccaaaacg catatgactc 660 accacgetgt etetgaceat gaageeacee tgaggtgete gggeeetggg ettetaceet 720 gcggagatca cactgacctg gcagcgggat ggggaggacc agacccaagt acacgaagct 780 cgtgcagacc aggcctgcag gggatggaac cttccagaag tgggcggctg tqqtqqtqcc 840 ttctggacag gagcagagat acacctgccc atgtgcagca tgagggtttg cccaagcccc 900 teaceatgag tatggtagee gtetteeeag eccaeegate eccategtgg ggeateattg 960 ctggccctgg ttctcctttg gaagctgtga atcactggaa gctgtggtcg ctgcctgtga 1020

```
atqtggagga aggaagagct caggtggaga aggggtgaaa gatagaaaag ggggggagct
                                                                     1080
actetteaag getgeaaage eagtgaeaag tgeeeagggg etetgaatgt gteteteeae
                                                                     1140
aagctttgta aaagtgttga gacagcctgc cctttgtgtg ggactgatga ggcaaagagt
                                                                     1200
ttgttccctg ccccttcccc ttgtgacctt gaaagaaccc ctgactttgt ttcctgcaaa
                                                                     1260
aggcaccetg catgtgteet gtgtteegtg taggecataa tgttaaggag gttggggaga
                                                                     1320
cccaccccca cccccatgt cccacccatg acccctcttc cccacgctga cctgttgctc
                                                                     1380
cctcccccaa tcatctttcc ctgttcccag agaggtgggg cttgaggtgt ctccatcttc
                                                                     1440
tgtcttcaac ttcatgtgtg cactggagct gtaaattctt tccttcccta ttaaaattta
                                                                     1500
gaacctgagt ataaatttac tttctcaaat tcttqccaat qaqaqqttqa tqaqttaatt
                                                                     1560
aacaggagaa gattcctaaa atttgaagag acaaaataaa tggaagacat gacgaacctt
                                                                     1620
ccagagtcca aaaaaaaaa
                                                                     1639
```

```
<210> 5723
    <211> 845
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (652)...(799)
    <223> similar to gi21992 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5723
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                                                                   60
tgcttggagt ttattttccg cttggtgcca ggtgcacagt tccaggtgtc aggaaagcta
                                                                  120
gcgagtgctg gggccgggcg gtagagagcg gggctctcac tggtttttgg tgtctgctgt
                                                                  180
gttgatgcga aggtctgctt gctgcagccg cctagtttac agggtggggg gtgggaggtg
                                                                  240
gggaggggg cgagggatgc ggagtgggga gaggggcggg gaggggctct ggtggactag
                                                                  300
cgcctccgca ggccgtgggg ctcggtggta accgctcagg tcaggacggg ggcccagcgc
                                                                  360
tggctgtgct ggactgaccc cccgggtctg cttcctcggg gcgtcccgag cccaggccac
                                                                  420
aggcggtcat gctgctggag gcctggggag gttccgagtg ctctgcggac tccaacaccg
                                                                  480
tggcccatga acgggagggt ggacttcccg aaaaagaagc tggcccacca atgacccggg
                                                                  540
tcagccttgg ggagacctgg ggggtgggga atggcttccc cggggcactc ggtactgctq
                                                                  600
caggagetgt tgctggaagt ggaacccagg cggcgccggt agtagtcgtq ggtqgccacq
                                                                  660
agcgagccgc tggaggggat ggccgccatg ctttagcttg ctggctggtg ggatctgggc
                                                                  720
ggcgacccct cgcgggcctc ggcgcacgat cacgggtggc ggggacgggg gcggctaggc
                                                                  780
840
ggggt
                                                                  845
```

```
<210> 5724
<211> 1555
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<212> DNA

<213> Homo sapiens

<220>

<210> 5725

```
<221> misc_feature
<222> (1211)...(294)
<223> similar to gi4928064 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
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                                                                    60
tagtggcggc aatggcctca gcccagccca ccctcacctg cttttccagc ccacaaaggg
                                                                   120
ggacgatcac ggcccagcaa aagcgatgct gagaggggaa acagtccaga gtccaacagc
                                                                   180
agaacttggg ggaagcggtc ggggtggcca ggaacataaa ctatgtatag qqqccqqqqq
                                                                   240
cttctgccca gggctcccct ggaccaggac gccaggtagg gcagggaacc tcagtagtcc
                                                                   300
tccacccagc cattctcaga gatgaatgcg tcaataacct ccttcatagc caagttgggg
                                                                   360
atgagetgtt cetgggteag ggggeteegg gteaeggggt caaaatgace cacaegetge
                                                                   420
aggtgctcct cgatgtcctt gcggtcgtag gtgatgccac tgggcgtgat gcacggctcc
                                                                   480
cgcatcagct caaagctgat cttgccacac aggtagtcgg ggatgtctcg cttcttcctc
                                                                   540
ttctcatcca cctgagaaaa aagctcgtcc atgtccgcca tgtacttgtc gtgcttggcc
                                                                   600
tcaatgcagg cctgctgggc ccggacgtgg ctgtcgtcct catcaccctc gtggtttcgc
                                                                   660
tagctctctt ccagctccct ctcaccgctt ccgcggcatg aagcctggag aggtaggagt
                                                                   720
gcagctcgct ctcctggtgg atgcgccgct cctcaatgct gttccagcgc ttcttcttcg
                                                                   780
cgaattcgaa agagcgcttg ggattgtcgt tccccqaaqt tcaqccqctt qttcctttqq
                                                                   840
ccaggctgta agctcgctgc agattggcga tggcctcatc atagctctcc atctccagct
                                                                   900
ggcactgccc caggaagaag tgcgccttca cagactgccc gtccagctcc agggcgcgcc
                                                                   960
ggcagtcggc cagggcctgc tcgtgctqct qcatcttcaq gtaqcacaaq qcccqqttqq
                                                                  1020
tgtaatacac ggccaccagc gggttccggg tgatcgcgcg gccgtagcag gccgccgcct
                                                                  1080
ccgggtactt tcggcccacg aacagacgat tgccctgctc cttgagctcc tgcqcqctcq
                                                                  1140
ggetettete ggggetteeg eegeeagege eeageegtge geegeetee tteteeteet
                                                                  1200
tgcccttcat ggcgccgcgc ggcacggcct gggctccgct cccaaqctcc qcqcctcqcq
                                                                  1260
1320
aggtcccccc gccggaactt ccggccgggg gcgggaccag cggggacgca cgcgtggggg
                                                                  1380
cgagtggggc cgcgcgtgcg cccaaccagc ctggacgggg acactgggcc cgcqacqtcq
                                                                  1440
ggggctggga ggaacgctcc agttccctgt ccccgcgctc ttaagggtgg gcgttcgcgt
                                                                  1500
aggccctggc ctgccctgct gaggtctctt cqqcacccqc ctcqqcqqcq qccqc
                                                                  1555
```

```
<211> 743
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (570)...(131)
<223> similar to gi5104682 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5725
tttcgtcggg cctgaacttc cagggccggc tactcctcgg cagagcgacc gcgcggtgtc 60
tcagagcgcg gcccggagcc gcactaagag cgctggacgg cgggagagag gctcggagga 120
```

```
ccggtagctc ccagcaaagc ggcccagcgg atgtcgggag ctatcttcgg gcccctggag
                                                                      180
ggcccgagct ccctggatgc cccgagcatc cacccgctgg tgtgcccgct gtgccacgtg
                                                                      240
cagtacgage geoegtgtet tetggaetgt ttecaegaet tetgtgeegg etgeetgegt
                                                                      300
ggccgcgcga ccgacggccg cctcacctgc ccgctgtgcc aacaccagac ggtgctgaag
                                                                      360
ggtcccagcg ggctcccgcc ggtggaccgg ctgctgcagt tcctggtgga cagctcaggg
                                                                      420
gatggcgtgg aggcggtgcg ctgtgccaac tgtgacctgg agtgcagcga qcaqqcaqqq
                                                                      480
gcggcagggc gggtgggtga ggagcaaagg gtacccggtt gcacagtccc caatgcttgc
                                                                      540
acatgcactc agcatgtctt cagaggacga cctggcagtg gattctccag cacctcccta
                                                                      600
gggcaccttg gccccaaatg tgaaccccat tataccggtg gggagactga ggtccagaac
                                                                      660
aagggacttg agccagtgtc cagacagtgg cagaggctaa ggccattcga tctggggaga
                                                                      720
gctcactggt ccccaattca ggg
                                                                      743
```

```
<210> 5726
     <211> 946
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(947)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (875)...(14)
     <223> similar to gi296669 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5726
eegeegggtg egeggetteg eegeeegagg tegttegget egggtaeeat eeteegegee
                                                                       60
atggacacca gcgacctgtt cgccagctgc aggaaggggg atgtgggccg agtgcggtga
                                                                      120
ggacctcgca gtcccgggga gggtgcggga ggtggccgcc ctcgggaccgc ctcgggccct
                                                                      180
gggacgggcg gctgggcggc cgcggagagg cgggcqcctc tqccqqqtca caqccctcqq
                                                                      240
agegeeecg eggggeagae caeeeggaee eeegeegeag eeeeecageg gaagegeget
                                                                      300
ggggcgggga cactgatggc cattgacccc cggagggctt cctgtaagaa gggactgctc
                                                                      360
agcggaggtc cgaaggcgca gaagtgggcg gagagaaggc gggccactgt tcgccctggt
                                                                      420
agggcccgga cgtcagaccc cccgggcgca gggcgcgggt ataggcctgg gactccagac
                                                                      480
gtggcccctt tctctcgtgc tctctggacc tggcgcgggg aacacctaga gcccataatc
                                                                      540
ggcctccggt ccctgaggat tcggaaactc ctgacgcagc taaagtgaat ctgqcqctga
                                                                      600
gatgccccct ccatgggccg gacgcggagg gaaggggtgc ccagttgggt tctqqqqccc
                                                                      660
ttcccctcct tgggcttcca ctatcccgtt tgacctcctt ttttcttggc ccttcctccc
                                                                      720
ccttgacctg gtgctgactg actgcttcca cctcccctgg gctggcgccg ggctgctgta
                                                                      780
ctcccgtagc ctccctgggc cgctccctga catcccgtgc cactcaagag ttagtgcata
                                                                      840
gtgtcaacgc tgagtgggtt cacagcactt ccaggtgcag cctggaggcc tcctttgggc
                                                                      900
tgcccccgcc acgaaatcgt cgacccggaa attccggncg ttgtat
                                                                      946
```

```
<210> 5727
<211> 2338
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (934)...(1411)
<223> similar to gi1707262 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5727 tectgaatte cegggtegae gatttegteg geggeeegeg geggaeeatg geeetggeee 60 ggcgtcgctg ggctttcctc acggcgtccc cgagcagcgt cgcagagcgg gccgacttcc 120 gggaaggaac tgaccagcga ctgagcggcg gccggcgcgc ttagcgccct gaacatgcgg 180 cagtccctgc gggcgacccc gggctccgga caggcggcgg cggaggcggc ggctcgggag 240 ggaaggaggc ggcggcgccg gcggaggtgg cggcggagac ggccggcgcc cggcgcggag 300 ccctagggag gcagttcagc gcggcctcgg gcctcgtcga gaaqqatqct qtcccqaaaq 360 aaaaccaaaa acgaagtgtc caagccggcc gaggtgcagg ggaagtacgt gaagaaggag 420 acgtcgcctc tgcttcggaa tcttatgcct tcattcatcc ggcatggtcc aacaattcca 480 agacgaactg atatctgtct tccagattca agccctaatg ccttttcaac ttctggagat 540 ggagtagttt caagaaacca gagtttcctt agaactccaa ttcaaagaac acctcatgaa 600 ataatgagaa gagaaagcaa cagattatet geacettett atettgeeag aagtetagea 660 gatgtcccta gagagtatgg ttcttctcag tcatttgtaa cggaagttag ttttqctqtt 720 qaaaatqqaq actctggttc ccgatattat tattcagaca atttttttga tggtcagaga 780 aagcggccac ttggagatcg tgcacatgaa gactacagat attatgaata caaccatgat 840 ctcttccaaa gaatgccaca gaatcagggg aggcatgctt caggtattgg gagagttgct 900 gctacatctt taggaaattt gactaaccat ggttctgaag atttacccct tcctcctggc 960 tggtctgtgg actggacaat gagagggaga aaatattata tagatcataa cacaaataca 1020 actcactgga gccatcctct tgagcgagaa ggacttcctc ctggatggga acgagttgag 1080 tcatccgaat ttggaaccta ttatgtagat cacacaaata agaaggccca atacacggca 1140 tccctgtgct cctacgtgta cctcggtatg atcaaccacc tcctgtcaca taccagccac 1200 agcaaactga aagaaatcag tcccttctgg tacctgcaaa tccatatcat actgcagaaa 1260 ttcctgactg gcttcaggtt tacgcacgag cccctgtgaa atatgaccac attctgaagt 1320 gggaactctt ccagctggct gacctggata cataccaggg aatgctaaag ttgctcttca 1380 tgaaagaatt ggagcagatt gttaaaatgt atgaagcata cagacaagcc cttcttacag 1440 agttggaaaa ccgaaagcag agacagcagt ggtatgccca acaacatgga aaaaattttt 1500 gagctgattt tttaaaaatt taagttttgt aagagcttta aaatattttc acagataaaa 1560 aattgcaaac aagtactctg gttaataaat gctgcttcct ttgtggaaat tataaaattc 1620 taactttaca tgtattttgt tattagaaat tttcttttat tgaatgagaa aaattagtct 1680 atcattttaa gagccaatat ggcaaacact ttcaaatact gtatattagg aaactgtttt 1740 ggtattettg atggaaaaaa atgeagegga aatgteatta tgaacagatg ttaaatagga 1800 aattattact tgttaacttc ttacagcagt agtaccttct ttaaaaaaaa aaaagaatct 1860 gcggtatttt tttaaaaaaa aagtttactg ctgtagtgtg aaatattgtc tggaaaggga 1920 tggtttaaat attaccatga tgtagttgaa atataaaata ggatttggaa ccttattgtg 1980 ataaatattt atatatgatg tatgtttgtc tcccctctcc aaagtaagga acccagctgg 2040 gcgtggtggc tcactcctgt aatcccagca ttttgggagg ccgaggtggg tggaccgctt 2100 gagtecaega gtttaagaee ageetgggea acatggtgaa geeecatete tacaaaaaat 2160 acaaaaaaat tagccgggta tgatggtgtg tgcctctagt cccagctact tgggaggctg 2220 aggtcagagg atggcttgag cccaagaggc agaggttgca gggtcaagat cgcaccactt 2280 gcactgcagc ctgagagaga gagagccaga ccttgtctca aaaaataaaa aaaaaaaa 2338

<210> 5728 <211> 1055 <212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (514)...(1046)
     <223> similar to gi3337385 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5728
aagtcagcag gcagtaagca agatgaggaa tcaatatagc aacagtttgg atcagactgt
                                                                       60
acagtttttt tttgtttttc tgagatggag tctcgctgtg tcacccaggc tggagtgcaa
                                                                      120
tgacgtgacc ctggctcact gcaacctccg cctcccaggt tcaagtgatt cccctgcctc
                                                                      180
agcctcccga gtagctggga ttacaggtgc ctgccaccac gcccggctaa ttttttgtat
                                                                      240
ttttagtaga gacggggttt caccgtatta gccaggatgg tctcaatctc ctgacctcgt
                                                                      300
gatccatccg ccccgccctc ccagagtgct gggattacag gcgtcacacg cgctgaccgg
                                                                      360
ctcagactgt actcttctag ccatctgaaa tacgttttct aggtagagat agattgtgta
                                                                      420
agggtacagt tatgaggata acagaaacgt ggcagattat ttaaaatcat cctgaaagtg
                                                                      480
gtgctttatc tgatgaaagt gattgtaatc cataggaaaa tgtttcaacg tgcgcaagag
                                                                      540
ttgcggtggc gggcagagga ctaccacaaa tgcaaagctt tttcagatca cccctctgc
                                                                      600
aagaaagcct ctttgcaact gggtcagaat ggcggcagcg gagcatcgtc attcttcagg
                                                                      660
attgccctgc tggccctacc tcacagctga aactttaaaa aacaggatgg gccgccagcc
                                                                      720
acctecteca acteaacaac attetataac tgataactee etgageetea agacacetee
                                                                      780
cgaatgtctt cttattccct ttccaccctc tcctcttcca ccctccgtgg atgataatct
                                                                      840
caagacteet eeettageta eteaggagge cagaggeaga aaaateactg aaacecaaga
                                                                      900
ggcagaggtt gagtaagctg agaacaggtc attgcactca agcctqqqca ataagaagaa
                                                                      960
atgtgtgagt ggaacaaaag aaaaaaatca aaaaacaaaa caaaacccac actccaaaaa
                                                                     1020
caaactaaca aagaataaat aaataatata aaaat
                                                                     1055
     <210> 5729
     <211> 1642
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1221)...(224)
     <223> similar to gi1707507 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5729
tatggcacga gtcagaattt atctatttag agataactta aatacaacac agaagctaag
                                                                       60
caggitetta aaattaetgg tgietaeaaa etgeetgaat tittqietti qetaqitaqi
                                                                      120
```

```
ttcaccctgc actgctagaa agaagcaaca acagtcagta tgtcattctt caacatttaa
                                                                      180
tggtgccaca gggttaaata atggccttac ttttttggcc tgaattttgc caaaattagc
                                                                      240
ttcaaactct ttttttgatc catttagatt tgctagatgt ccatccttta ttctqtaqcc
                                                                      300
tgaggaattc agtttcctta tcctgtactg tactatctgt ggtgttaatt caagaaccat
                                                                      360
tggcgtctct cttatctgag ctatggaaat tccttctctc aataatcctt gcattctctc
                                                                      420
ttctaaaact ggaacagaat aatataaaag ggcaggacat ttcaaaacta attgcttcag
                                                                      480
gtcatgatct gtgcatttaa aagcattttt agagaaggaa atactattct gtatacttct
                                                                      540
tgggcaaagt tgaaaaagaa atcctttgag tttggataga agctggagaa tttcaaagct
                                                                      600
qqtqaaacct tgctcctgga gaaattctag tgtttccttt atagctgtgg gagaatttaa
                                                                      660
caaaataaat gggttttggc ttaacaattt tagtagccaa actttcatgt tggcctcaga
                                                                      720
gccacctaca tctagataac tctcttggag aattcttacc atttgcttat tcttctcaac
                                                                      780
aggattatga aaaacattag gtgcagctgt caaaagtctg ctaatgacca catttttag
                                                                      840
tcccaactct tgaaagaact gaacattcag cttctggttc tcttggtctt taatagtaaa
                                                                      900
gaaagattct ggaaactgct ctattaactt gattaactct tcctcatttt tgcagaccaa
                                                                      960
ctgccagagt tttctctggg tgttaacagc ggttggacta cagacaattg cttccgggca
                                                                     1020
gcgttccaaa atactggcta cagcagtctc atcggcacct agttcttgta aaatattcgc
                                                                     1080
aatttcttca acataggttt catcctctaa aagtacccat ccttttaatc tacqaatttt
                                                                     1140
cctaatgtca actgaacatt tatagagctt ttccactgtt cttgtatttt ctttgctcga
                                                                     1200
ctgtttatca gttgtatagg tgaagcatgc taagaaaggt ctgtattttg gaggtgatcg
                                                                     1260
catctttctg aaagaacaca gcctgcagga ctgggatctc agcagcagct tccacaacat
                                                                     1320
ggctgcaatc tactagctag tttccaccgt cctgggactt aaatggactc attctatctt
                                                                     1380
acagtetete eccaeagate ttgteeteat ecagatatte agtteateea ettgggatte
                                                                     1440
tttccaactt cttctcaaaa tgtgatcttg tcagttccct gcaataaacc gtcggcgtca
                                                                     1500
gctccaagca aggcacaggg agtcccgggg gccaggcccc gtccttccct ctctccgg
                                                                    1560
ccagcctccc cacagtccgc agtccccgag gcctggagcc gggatttcgg tcctcggtct
                                                                    1620
caagaagctc ccgacagttc tc
                                                                     1642
    <210> 5730
```

```
<211> 3005
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3006)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2534)...(1270)
<223> similar to gi4884303 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5730

ttgaagttta ggtaacattt cctttcctca aaggataaat gattcagaag gaatatatgg 60
taattatgta aaaaaacaaa aacaaaaaac cctcatgttt cccagtttta accgtaaaaa 120
cagaaatcct taaaacacat acatacactt aggaggaaaa aggagatgaa tgcccaatgt 180
ccattagcaa gtgttaccga ctaattctat aatctagttt tttctagtta tatcccaaag 240
ttcccaagtt tagtcctaaa attttctttc tgtacattta cccatttgaa caacatcaac 300
attaaataac taaaacaaga tggtccataa aattctttct atagattgtt ggctgaaagt 360
```

```
ctcatttcta aaactagtac ttcagtattc cgaaaagctc tctctgcgtc ttttcatttc
                                                                      420
tattagtatg tttaggacat aaagcattaa aataaggcta ctgctaatgt accaaaatcc
                                                                      480
atgttccaga aaggaaaaaa aaaaactaat aattatcatg tttgaaaggt atgtatttta
                                                                      540
ttactcttgc aggtattttg gacaaaaata ttgaccagct aattatgctc ttccacacat
                                                                      600
catgttcact gagtttacta ccacagtttt agtgcaacaa aatatctttg aaaagccact
                                                                      660
ctacagtaat tatggcaagg ctcattaata tgcagaggta aagatttcat ttgtatagaa
                                                                      720
acttagaaaa taatgtttga aaaggaaagc cattccatca ggctaaatat tttttgtata
                                                                      780
ttaaaaaata tatataaata tttcttgaat tagttttata gtcaattttg atgcagtgtc
                                                                      840
attgagtggt gataaatttt gagaggtata tgttaaacaa acaccatacc tggagattat
                                                                      900
agtcttaggt aaacatttaa atacacaatg tcaaggtagt ccccctttta aaaaattttt
                                                                      960
gtacccaagt aagtcataca tttaatgttg acatttcttc ttacctgtgt gcctcacacc
                                                                     1020
aataaagtac tctgcattaa aatttaaatc ttgagacagt agtacagcat tgaaaaaaa
                                                                     1080
ttgtaaagca gcttagatac actgaactca gattttacat tttcatttgt cagattagaa
                                                                     1140
tataaaaagt aagcttgaaa atcaacttga aaaagcttat tcttcctcaa gaaaaagtat
                                                                     1200
gaacaatctg aaaatgatca actagtgtga atgaacattg tacatagtta agtcacattc
                                                                     1260
agtggttgct aaacatacca ctccctcctg gaaattacgg aaccatctac atgtgaaact
                                                                     1320
aagtcatctt cgttttcatc ataatgttca tcactgacaa acttcattcc catttttaga
                                                                     1380
tcttcataat aatccattgg tctttcaaac ctattgagat tttctacatt gttccactga
                                                                     1440
gttttttcag gctcttctaa atagtcttta cgtattagat tqttcactqq atttttqttt
                                                                     1500
tcttttttta cactgtctgg gtaaggatca agctcatctt gttgaagaac atctatttgt
                                                                     1560
gattettttt geatatetga tggtggaatg tagttettgg caaagtagte tecaegaaae
                                                                     1620
gtccgtcttc tcctatagca gaatatcccc agcccaaaac acttaacaag taactatgaa
                                                                     1680
gagagccccc accccactac actaggcaat gatcgtgggc aattgtgtcc atcccttaat
                                                                     1740
tgttgcccaa agttgacaat ggggaagggg caatttttta gggttctgtt gctaggatcc
                                                                     1800
ctcgatgttc aggcagttga gggggatgcc cactggaatt gtagggctgg aaggggtggg
                                                                     1860
taggtaggta gggagggatc ttgaaatgta ggatggactt tttgggtcac ttcttttgac
                                                                     1920
ccaggggaat ttggtcactt tacagatata aacaccagaa taattgaaag tcaatggatg
                                                                     1980
gacaaaatga agagtattgt ctgaagccaa taaaccatca ggccattgtc catccaacct
                                                                     2040
gctccacaca gatttgaagg gtggtggatt tgcatcagca ttacatttga gattaacacc
                                                                     2100
ttttcttcct acaaaccaat ttccatcata tcctgttacc gaaacttcag gagcatactg
                                                                     2160
tatgtctaat atgaaagagt atcggatgtc cttttccaag gctggatgtt ttacaacaca
                                                                     2220
agtaattege etteetetag caaatetggt tggaaatage ttgtaetgge tgataategt
                                                                     2280
tgccgtttca tttggaaaag aagttgtagt ggattccatt tcaccaagat caccttccca
                                                                     2340
qtcaatatqt gcaacgggtt ttccagtggc tgcgatgcaa atggctgcta ctgtttcatt
                                                                     2400
tcctccatca attaaagaat ctggcccttt tatcaggctc acagtgggtt caactaacac
                                                                     2460
agttacagtt gtagaggact gggcatttcc aagcgggaat gtaacagctt tgcagatgta
                                                                     2520
ttttccagaa tcagagaatc ctatgttatg cagagtaatt gttgcatcat taagtgagta
                                                                    2580
atttttaaac aagactette eetgatatte teettgaaca qaqaateeat attggggatg
                                                                    2640
gtgaactgca acagtctgtg aacttttgcc atgtatcttc tcccatgaaa tctgtgttat
                                                                     2700
ggtttcattt acttcaatta aacactttaa tgaaacattc tttccccata ctgctgtgac
                                                                    2760
atgtggctcc acaataattg gtccagctaa ggcaccacag agcctggaga agagcagcag
                                                                    2820
cgggaagagc agcagcagca gcggaggtgg cgtcgggggc tgcagcagga gcccggctcc
                                                                     2880
gaggagagaa gcggaggaaa gttgtgcttt gccgcctcca ggacacagcg ggaattcctc
                                                                     2940
cactctgata gtgntctcaa aannnnnnn nnntnnnagg gtttcctaaa nnnngggggc
                                                                     3000
tagca
                                                                     3005
```

```
<210> 5731
<211> 5889
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(5890)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (4760)...(694)
<223> similar to gi3882297 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5731 ttttttttt ttcggattag aaaacctgtt tattaagact gggtcacatc cagctagtac 60 atttcagtgc cctttctggt gctgcctccc aggagcagac actgcaaatt tcagaacccc 120 catctagaga aacccctaac ctgtgatcta gcttccgagg ctcagtgttg gttcttgtgg 180 tagtgctgat gtgtgggtac cactgaggcc aggccacagt cgcatgtacc ctcctctggg 240 ctgactcacg aggctacagg ggacagcaca cctaatgagc aggtctgtcc tccagacata 300 ctcattaaca agcacgttcc tggctaaaaa ataaccagat ctttttggcc gtgccctcag 360 gttggagaaa gaaaactttt aatttggaat cactacaaag acaaatggtt tctacaaatt 420 attttattaq aatgtcagac tcaaaagaac taccaggaac atgcctgaaa atgctatata 480 tgatttatgc ttgacccatg acacctgctg tcactggatc cagagtgagc aagggaaagg 540 aagtggaggt aggcggggac agcaccagcc ctggctggcc agacctqaqq cccacagacc 600 tggtccccac aaccaggatt cctacaatgt acacattcct aattcaggct caactctccc 660 tttacccaaa aagtaaaatg cctcagggac tcaatctgaa tcactgtctg tctcaggctt 720 ctttcacatc ccacgcttga atttgtactc ctgggtcaca tccccatgta aagcggtcac 780 ttcatggaag gtaccagagt gtaagtttgt gggcaaccca gtqqqctqqq qqccaaaaaa 840 gtccaaactt tcacctttgg gcccttctgg ctggcaaagg tcagcctctt gatgggagat 900 gaggcctatt ggacttggca tctccaatca ccacccacca gcccttcttc acgtttcctg 960 cggaagaaaa ggcgcattga gcaggggcct gtgacttccc tcctctcgct tcaqctqcac 1020 cagcaccaca actgggccgg cacttgcgga tgcctgtcct tatctaccca cctcataaag 1080 atagtcgatt attaggggta ggggttacaa aagcgaggca ccatctgcaa ttctggctgt 1140 caagtcaact gaagccaacg cgttcccgtt cttcatcctt ccatctccca tgatgtcgaa 1200 aaacactctc cattcccctt gtctgtgcca acgttttgaa tatgctccag aaggtgaaag 1260 tgtggcagct gctttcaagg tatgaagtcc ttggaccaca tqqcttqqqt qaccatctqq 1320 gccagttccc atagcttgcc aggagcaggg ctgagccacc ccatttgctg gaaaggacat 1380 cccacgcagc cctggatgag ccggattgcc ttactaagga tttcctccqt atctgactgc 1440 aactcagcac ttcagctgca tgcgagacaa gtgaggcctg caggagcagg tttggtcttg 1500 acgtgcggat cattgaactt agggttaatt cagcttgtgg gggaccttct gagccaactg 1560 cctcaggaga ttgtcttcat ggtgccggat gggaatgttc tcatactctg ctqcattgqa 1620 gatgateteg ataageeete geacettggt ettggeattg agggaeatge tgaagagett 1680 caattggtgg tgtagttgat gtaatagtag gcggcgatca tgccttaggt tcagaggcqc 1740 cacgtccatc tcgtcctcga tgctgatgca cttggactgc tccaggtcac tcagggtctg 1800 ctccaccage tetgacaagt ggteegacaa gtgacgatgg gagatgeect geaggttgta 1860 gtaattgggg ttctgtgtca tgcggcggta cagaaaggtc caggtgaggt agtccacagc 1920 atcctgcttg ttctcaatgg tcttggtgac gatctcagca ttgaagtggt catgcataca 1980 gtggtcccag gtgaagattc tactggcaaa tggctcaata ataagaactt cttgaaaaaa 2040 tccttcttgg agccctgaca catgatgaca cagcgcccct catcgtcctg caaaagggcg 2100 gttggcgtgg cccaccatct gaagcacgtc atagatgggg taatccacat aggcgtggat 2160 cttgccattg tagtactggg tatccatgat gattaccagg tgggcagcca cgttcatgcc 2220 ccagcagaga ctccgagaag ccaccaccac ctgggatagc ccctgaagct gaagagctgc 2280 tccaccaggg cgtcgctcca tggggctgag cccctcagtg caggtagccc accccatttt 2340 aggeagettt teetttgagt gtgetgttea tttagetttt teeaggtaeg gatteagate 2400 cttctcggtg caagtgcaaa gaacctctgc cgttggatgt ctgctgcaca ggtggtgagg 2460 atgtcaatgg cagtgaggcg ggtctgcttg cgagacggca caaagacaat gacaggcttc 2520 ttqqqcqaqt qcttgqtqat agcatgqtac acaggcttgg ctatggagag caggctggtt 2580 tgtgtatggc tgatgttgaa gccctggatg tgcagctcca aggggacggg acgcacattg 2640

2700 ttggagagcg aagagctgag tgccacaatg cgaatgggcc gctcaatctg ggaggagatg 2760 tagegeatte gggageagat caettetaag acaggeeeat tetegeeeee qataaggtgg 2820 acctcatcca ccacgaagag gttgatgttc tgcacgttct tgcgctgctt ccatcgccgg 2880 gaaagtatgt cccacttctc aggggtgctg atgataatgt tccctttgcc cagcagcttc 2940 aggtctgtgc tggtctcgcc tgtcaggagt accaccttct tgttgagcct gtcctggaac 3000 ttctcgtacc agtccatgta taccttgctc tgccagggcc tccatggggg tgatgtacac 3060 acagcgcccc tccgagctct gcagcagcat tcgcaggatg gcaaactctg cacaaatagt 3120 cttcccgctg cccgtggggg cccccacaaa cacgttgtcg tcactgttgt atacagtgtt 3180 aaacacctgg gtctggatgg gattgaagaa aggaaattta tcttggtaaa gactctcaaa 3240 ggcactgttt ctcagagcag acacgggcaa gggctgcagg tccaaaagtt cggttggagg 3300 ggggtacttc tccggcaaga tcaggtgccg gaaggagaca ggcagctggg tctcacaaga 3360 gagccagcgg tcagacacca ctcggatgaa gtactgaggg ggcagcggtt caaagacagg 3420 cacgaagaat gtaatgaggt gctcgtcctg ggcgtacttg gccttgagga gaaaatactc 3480 atggtgcaga atcacctcgc tgtccacatc ctccaccaga atccaaaaag cctcggatga 3540 accatgcacc ttttcatccc actggaaagt nctggccgtg atggtccaac tccaccttca 3600 gggtggaacg tgtgataggc tgcaggtgca ctgacaactc ccaacttggg aaacagatgg 3660 acatatttgt ggatggtctt ccccatcttt ggcatgcgga taagctcccc aatctcatta 3720 tgattcaggt cgtacagacg ctcaaagggg aaattcttct tctcaatctt cttcactact 3780 tcctcaggga gtttccggaa ctggcgcaga ggacacatgg actgccacat gcgtttgtcg 3840 atcatcttgc agaggttcag ggtcttgtct gtaagctgtg cccaacctcg gttcaggaca 3900 atttcaaata tcgctcgcat caaccggcca gccgactgtg tgacatacac catgtcagcc 3960 atcagtgcaa agccctccaa tttcagctgt gagatgaagg cttgcagaag aacgttgatc 4020 ttagcactgg gttcctcaat gctctccttt acagggatag gcaccctctc cagcaacttc 4080 tgcageteca getteteete eteteteact gtgatgttet tgaacteaga ggacaatgag 4140 aagaccctga aaagctcaat ctcactcagg gtgggcttca gcaqctggtt gtaaqtctgc 4200 actgtatcat tggtgatgta gtagtggctg gctatacggc ccagttctgt cacctggaag 4260 ttgcccgtct tcttgtcgta cttgaccaga ttgttcttgt ccagcatcag ggcagctgta 4320 tgaaccagat ctagtcggcg ctggtccagc aggggatctc ccttgaggtc atcatgagag 4380 atgccataga gggttgggga tcgcagcatt cggatataga ggtaggcata gcccagccag 4440 ttcaccgcat ccttggcatt ctggacattt cctagcacga tttctgcatt gagcatgtca 4500 ggaagctttg aaaccatctg gctttcaata ggaagttgtt gattgaggag ggacaggtag 4560 tactgtaget ecceatgaga tgtgatgagt atgeetteae eettggtgte atactggggt 4620 cttccggcac gtcccagcat ctgcagaatg tccagtgctc ccagttctgt ccaacgcccc 4680 ttctctggac tgtacacctg ggtgcctttg atgatgactg tatgtgcagg gagattcaca 4740 ccccaagcta gagttgcggt ggaaactaaa acctgaatat gtttatcaag caaaaagatc 4800 ctccacgagt gttcggtcaa ccctggtcat gcctgcatga tgaatagcaa agccataggg 4860 4920 ggaggcagaa ccctcgcgaa gaaacagacc caaagtgtcc ttctccagac acatgtcacg 4980 gattgccctt gctgtcttcc cagtttcttt gcgagaatgg acaaacacga gcacctgatt 5040 ttttccagca tgttccatga ttttctcata gactatttca ttcatgatct ggaaacgttt 5100 gatagetttt ttetetgtga tgeecacata tgtttgttee agaggeaegg ggeggaaget 5160 gttatcaaag tagaagaggc cettagcagg gtcgactege agaaaggtgg ceacatette 5220 atagttgggg agggtagcac tgagaccaat gagtcggaca tcttcttggg tcatctcaat 5280 gtttcggatg gccctggcca ccaaagcttc taagacagga cctctgtcat catgtagaag 5340 atggatetea tecaagaeaa tgagtegeae eagetgggtg taggtgeget eecegeeett 5400 gcgtgtgatg atgtcccact tctcaggggt gcagacgata atctgtgtgg cactgatttc 5460 ctccttgcat agctggtgat ccccagtcag ctcagcaaca gtgatgccat atgtggccag 5520 gegettteea aaactgeeea eeateteetg gaeeagggae egeatgggag etatgtagat 5580 gatcttgaag tcatccacat tgattgtgcc gtccatgttg atgtgtttcc ctatctctg 5640 gagcatacac atcagggcca cgttggtctt gcccgcacca gtgggagcac acagcagcag 5700 5760 gttctcatca gtctccaggg cagcacggta gagcttactc tggatccggt tcagcgtttt gaagccctca aatcctgcct gggcatactt tggcagcttc tccaccggga gcaattgttc 5820 ttctgagcca aagggcttgg gcttcaaagc aggcacatgc acctcttcat agcccttacg 5880 ctggcgacg 5889

```
<210> 5732
<211> 2716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (593)...(32)
<223> similar to gi2388904 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5732 gcctttctct tctagctttg ggatctcagg aggaggagaa cccaagaaac tgtggaatga 60 tgtgaggcac taagtgaccg cttcagcgca cgatccccga tgaccagatg gcgcacactc 120 cttttttcca gatgagtatt tcacctgctc ctccttgtgc ctcagctgtg gggttggatg 180 taagaaaagc atgaatcatg ggaaggaagg agtgcctcat gaagccaaga gccgctgcag 240 atactcccac cagtatgaca accgagtgta tacctgcaag gcctgctatg agagaggcga 300 ggaagtcagt gtagtgccca aaacatctgc ttccactgac tccccctgga tgggtctcgc 360 aaaatatgcc tggtctgggt atgtgatcga atgtcctaac tgtgqcgtgg tctatcgtag 420 teggeagtae tggtttggaa accaagatee tgtggataeg gtggtgegga cagagattgt 480 gcatgtgtgg cctggaactg atgggtttct gaaggacaac aacaatgctg cccagcgcct 540 gttggacggg atgaacttca tggctcagtc ggtgtccgag cttagccttg gacccaccaa 600 ggctgtgact tcctggctga cagaccagat cgcccctgcc tactggaggc ccaactccca 660 gattetgage tgeaacaagt gtgegaegte etttaaagat aacgaeacta ageateactg 720 ccgagcctgt ggggagggct tctgtgacag ctgttcatca aagactcggc cagtgcctga 780 geggggetgg ggeeetgege cagtgegggt etgtgacaae tgetaegaag ceaggaaegt 840 ccagttagct gttaccgagg cacaagtgga cgatgaaggt ggaacqctca ttqctcqqaa 900 ggtgggcgag gccgtgcaga acactctggg agccgtggtg acagccattg acataccact 960 aggtctggta aaggacgcgg ccaggcctgc gtactgggtg cctgaccacg aaatcctcca 1020 ctgccacaac tgccggaagg agttcagcat caagctctcc aagcaccact gccgggcctg 1080 eggacaggge ttetgtgatg agtgeteeca tgacegeegg getgtteett etegtggetg 1140 ggaccatece gteegagtet getteaactg caataaaaag eeeggtgace tttaaceeca 1200 gccccctctc cgagtccttc acaattcctt aggttctcag ggttagaaac agtcttgcga 1260 1320 ccactttccc tcagtggggg tgagcctggc ggcaggcccg aaggtgtgga cccctcaggg 1380 caggggacct tgcaacttat cgcaaagggg aatgaacctg aatccgttgc atttatttca 1440 gttaaaaata atgaatatat atgtgtatat ctctctctca tatatacata tgaaaggcac 1500 teggggegta tegaggetge tgetggetgt gaagaetteg cacagtetee teegcacagg 1560 qtqaqgtqgc agtggcagca cgtcttcctc atgagccgag ccaggtccat ggccaccacg 1620 tggctggccc cttcctctgc tgctcttgga gccttggaag cctctcctgt ccttggctct 1680 tecetecatg cetgteaget geetggggag tgageeteee tggteettee tgeetgaaac 1740 agcctgaagg gaatteteee taggteteet gggagtegag teecaattet tqqettaage 1800 ctqttttaqt cagagaccac ccaacttatc gtgcaggtca ccggagtggg tggagggtca 1860 gaggtcgggt cttcggccct gagaagcaga aatgcagggg ccgtgctgtc cctggtcccc 1920 cagggaacag caaggaagga actgagcctt ctccagcagg gcttcctgtc ccgatgcttc 1980 tgtctccact cggctttccc aaaaggcggc acccagctcc tcaatcgaag catctgcctc 2040 ccacccctcg gccccctcaa gcccaccatc tgcttctgag tgtcqcacta ggattttcat 2100 tgcttatttt aaagtgtctt aatcctttgt tcccagacac acaacccctc tagctctcgg 2160 aggggcgatc atgagaaacc ttccagggaa actgagcaca ggatgaactg ttagttgttt 2220 ttaaaagtct atataaatat ttcaacagat cgtaaagaaa aaatttatct ctttggtcct 2280 tgcaagagaa gtcaaaggaa cttttgtttc tcctcaagag cctggacatc tctgtctgtc 2340

```
atgactggaa agggcccgtt gtgctgaaat cctatcatca tggtggattt gatcttcagt 2400 ggccaaacac gaattaaagt ataattctta actgaactgg tgggtgggtt gagctttagg 2460 gaagtatatg gcggtcattc ctggtgcgc tatcggtgtg acatgagccc tggagtgtgt 2520 cgtccctctc agccctgctc ctcctgcctc ctggggtcca gtgactggga ccctactcta 2580 gaactgtgta ccatccaatt cgccatcata aaggaatctt cctgctgatt ttaaatgctt 2640 tcttgattga ggaaggtatg ttaaataaag agtagattt cccagtagcc taatactcaa 2700 cacatgggat tttacc 2716
```

```
<210> 5733
<211> 2022
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1293)...(722)
<223> similar to gi1276645 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5733 ttttttttt ttggagagag gttgtgttta ttcaccatgt cataccagca tatagggaac 60 ctctatttag gagctggtgg cctgcactca gcaccgcaca gataaaaata tacgaacttt 120 caacacagat ccaaataccc tcacatttta aaagtcagga ttccctacac aagttttaag 180 ctgacgggga ttcaagttct gaagttttca tacatagctt taacttgtat taaacacatt 240 gtttatttac aacggtggag agagaataag gggcagttaa ggccactttt ctcctgtgaa 300 aacgctgcca aaatatgtga catagagtac aacctaatat agccaaaggt tctcaaaaat 360 catcttttct tggcttcaac gtaaattgaa taatcaatcg gggagtggga gagcggctgc 420 cgaatagcac cagggccatg ccagggccac gcccaacaat gggcgtgtcg cattcacctt 480 tttcattgag ctgcccctca gagctgctgg ccgaactgac gcccctgcac tgggccgcag 540 ggtgtgcgcc gcaccccaga ccgggtctga aagcacgtgt caaccgggtc ccttcagttc 600 ccatttccca aatccaccca aggtccagtc cgacagacat ttccaaaaag aattcctgtt 660 ctaggaccca cttgcgcttg aggagcacac ccgggggttc aaaggggcag ccaccggggg 720 gtcaaagggc agccatcagg tactccccag ggaagggctt gcggccacca gtcacttgca 780 acceegeete aceteegatg cetgetgtge eeagggtggt ceegeteata gegaeggeee 840 tgtgcgttca tacgacctcg agcgcttctc gtcgctgatc tctgtagtaa atgacttttc 900 ttcttgtatt ttcccggatt atccgcccgc tcccgtgacc tgcttcgaga acggggaaga 960 actocggoto cogaaaactt gtgtggotta ctgqqqqtac ttqcaqtoot tqqacttooc 1020 gggagccccg aatctcaaga gcctttgtaa gggagcgctg cgggggggcc tgtctcqqtq 1080 gggagtcact cctgctccgg gagcggctct gcgacttgga cccaccagat gtggagccqc 1140 tgtcactttt cctcctctta ggagacgctg atcgggatgg ggacctcgag tagctctgct 1200 cacggctccg gctccgactc cgactctctc gcccctttgg caagccgttc acggggctgt 1260 ccqccttggc tttcttggcg ccctccagcc tcctcttggt gttcttcaca gacagtgggg 1320 aaggettget eeetttaeet tetttggggg attecaetag aateagaaca agaggttaaa 1380 agccaaccac aaaacactct cccaataaga aacaagttcg tagagcgaga taaggcccct 1440 ctacaggtca tacagcgacg caagcagact gtaacttccg gctcccagct gggacccaga 1500 acttacacag acatcacaga aatgcagatg gggctggacg cgggggctca cgcctgtgag 1560 cccagcactt cgggaggccg aggagggcgg atcacaaagt caatacattg agaccatcct 1620 gcccaacatg gtgaaacccc atctctacta aaactacaaa aattagctgg gcttggtggc 1680 acgcgcctgt agtcccagct actccagagg ctgaagccag aagaatcgct tggacccagg 1740 aggcggaggt tacagtgagc cgagatcacg ccacagtact cacctggcaa cacagcgaga 1800

<210> 5734

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ctctgtctca agaaaacaa aacaaaacaa aaaaacccca aaacatgtga gtgtgtgtct 1860 ctctctctct ctctatatat atatacat agacacacac tcacacaca attacctgag 1920 cgtggtggtg ggcgcctgca atcccagcta cttgggaggc tgaggcacaa gaatcaccag 1980 aatctggtag gcggagcgtg cagcctcgtg ccaagcttgg cg 2022
```

```
<211> 2296
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1947)...(1305)
<223> similar to gi5921473 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5734 cgcaggcacg tgctaccacc acgcctggct aatttttagt ttttttacag aagcgggctt 60 ttgccatgtt gtccaggctg gtctctactc ctgggctcaa gcagtcctcc tgcctcagtc 120 tcccaaagtg ctggaattac aggggtgagt tgctgcgtct ggtgttggtg actttctaga 180 qattactttt tggtttacat cattttcctt gtgactattt ttactttttt ggggggcggg 240 gggacagtct tactcttttt agtttacatc attttccttq tqactattct atttttactt 300 ttttaggggg cggggggaca tgagtctcac tcatgttggt caggctggtc tcaaactcct 360 gacctcagtt gatccacgcc cttcggcctc ccaaagtgcc gggattacag gcgtgagcca 420 ctttgcccgg cctgtatttt tacgttttaa taaatccccg tatttttgtt aaaggctggg 480 taacctgact cctcccctca tttctactgc aaaataggag tacactgggg cctcccagtg 540 gagetgttet etgetgtttt aaattacttt etaeteetee etttetaaeg teeacteetg 600 gactcatttg ttagatcaat atatactggg actgttgtgt tttctttgag tgtactagat 660 ctctttccag aagagcttcc cttgatccag atctccctaa ttgggaatga tgatttcaca 720 gactagagtc tccgatgctg gtcatgatgt caaaactaag ttctgactca tttagggaac 780 tggatacttg ggtctccaga agggccaatg ggagggccat aattctgttt attttcaaat 840 tgtcttgttt tcaccttgtt agaatgaact ctggaagccc agccagggac aatgcacctt 900 cacagagatt ctgcactaat ctgagtgaag gtctaaggtt tggaatctcc ccctcatgga 960 gagaagettt gtatggetgt catgettaga cagtgattee tgeaacttga cetteagget 1020 gggagaggtg gagagccatg cctgttctcc ttccttgcta tggaatttgc tgacacaata 1080 tetteegeet ggtgetggge atateetaag aacttacaae ttteetgtat tateetgtgt 1140 gagcagctgt caccttattg ggggaaaaat gcctgaaaat tagggggcac ttcaagtaga 1200 tagcttctat ttcctatatt tgtcttatat acaagtattt gcttttatca aaataattcc 1260 aataaagcat tttaaagtaa agaataatat aggaaataga agctatcata cttgaagtgc 1320 cccctaattt tcavtgavat tttcccccaa taaaggtgac agctqctcca cacaaggata 1380 atacaggaaa gtttgtaagt tcttaggata tgcccagcac cagggcggaa gatattgtgt 1440 cagcaaattc catagcaagg aaggagaaca ggcatggctc tccacctctc ccagcctgaa 1500 ggtcaagttg caggaatcac tgtctaagca tgacagccat acaaagcttc tctccatgag 1560 ggggagattc caaaccttag accttcactc agattagtgc agaatctctg tgaaggtgca 1620 ttgtccctgg ctgggcttcc agagttcatt ctttactcaa ggataacacg gcgatgaacg 1680 tcttacaact cagttgtttt gagtcagcag gggctgtggg gccgctagcc gagttccccc 1740 tgccacgagc taggtcagtt ccaagcaaag acaccagaaa ctccagtgtg caacggtagt 1800 tcacccaact gcactgggga ccgccctctc ctaccccagc caggccgcga cgtggccgcc 1860 cgccggctgc tgcgcaaagg cagcgcaagc cgttgggatc ccctgctccc cctcactcaa 1920 cagtcgggcc attacaactc tcatactgcc aacccacgag cccacttcgc aaccacactt 1980

<210> 5735

```
atccccact tggctatcat cacccgatga ggcaaccage cagaacgcct gaacgcagge 2040 acatacttce tattctacac cctagtagge tcccttcccc tactcatcge actaatttac 2100 actcacaaca ccctaggcte actaaacatt ctactactca ctctcactge ccaagaacta 2160 tcaaactcct cagcctccca agtagctggg actacaggca tgcaccacca cacctggcta 2220 tttttgtatt tttactagat tttcaccatg tttactaggt ttcaccatgt tagccaggtt 2280 ggtctcaaac tcctgg
```

```
<211> 1671
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1179)...(1490)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5735 caaggattaa aagaatatga tcaagcattg gtaaattttg ttccaaatgt ttaattttt 60 aaaatagaca actaccttta taaatcatac acctaactta aatgtttttt tccaattaaa 120 ggctgatctt aagaaagctc aggggatagc accagaagat aaaggtaagt tggcagcttt 180 tgtagtgaaa gttaattttg ttatttaaat acttatcctc aggaaccatt gttcactttg 240 ccagatttta gatgtttgtt caacagacac tacagaatgc ctgctgttgg gccaggcatt 300 atcatatage aatgaacaag acagteaaag teeetgeest caaagagett acattetact 360 cccattcaag aatatagtag tttttcacgt tatttattct tcaagttatc atctctgtag 420 ttttttatat gtctaaatac tgtttgtctt atggtatcct ttgagactgt gttcctattc 480 tggttagtct aggtcgagag gctcagcatt gtaagacaca gtattccatg gtaaatttaa 540 ccatttggga cccattcaag ttgaatgtgg ctataacctt agtattgatg tactggttat 600 atgttttagg aaactatgac aaaaataagc ttgtttttca aataaaccaa ctatgaatag 660 tgacactaga tctgggtatt acaaaatgtc tttggtctct tattactaaa atgaaacaag 720 ggaagcaatt actgttctct aatgtagagg cagaaggcaa atcttgatgt acttgagttc 780 tctcagttga catcctctaa aattacgttt catttctgtg tttgtgtgat tgctcagatt 840 ttctgttact agggcttagt tactttgtag agaagttttt tcaaggggta gttaacatta 900 aaatagtttg ttagtcacca taattttttg gatattttga gaaataactc acattgcata 960 tttattttac agctatccag gcagaattgc tqaaaqtcaa acaaaaqata aaqqcacaqa 1020 aagataaaga gaaggcagta tatgcaaaaa tqtttqctta qaaaqgattc aqttttqctt 1080 attgtgtgtt gattgtataa atgcaataag aaaatgtaaa ggtttttgtc tatgaatatg 1140 atccctaatg tgtttctttt gacaccttag ttccttactg tttacagttt aggagtactg 1200 ataggggttc atgcttaata aacatgtcac aatacagtaa gtaaagtggt tttgtttgtt 1260 tetttgagat ggagtettge tetgteacee aggetggagt geggtggege aatetegget 1320 cactgcatcc tctgcctccc gggttcaagc aattctcctg cctcagcttc ccaagtagct 1380 gggattacag gcacgtgcca ccacgcccag ctaatttttg tatttttagt agagatgggg 1440 tttcaccata ttggtcacgt cacgttggtc ttgaactcct gaccttgtga tccacccgc 1500 cttggcctcc caaagtgctg ggattacagg tgtgagccac cgtgcccggc caagtaaaat 1560 qttttttaaa atggttatgt gcattattca taaaaaataa tggtgtccag tctttttaaa 1620 cttgtaaaga cacatcttat tgaataaaga gatgagagct taaaaaaaaa a 1671

```
<210> 5736
<211> 3035
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2946)...(223)
<223> similar to gi29731 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5736 caccttcaaa tgcactcaag acccataaaa taataaaaca tactagctgc tccattttca 60 tttcaccact ttgaaatctt ggaaccactg atgtgatatc ccacagagag ggcaagactt 120 cactgtgaag tcaccaaagg aactcctgcc cttctaggtg ccacttgagt aataactccc 180 aactcactgg tcctctaaac ctgcagcagg gagatggtgt gctaggtagc tacatgggca 240 ggagaagaaa tggaaacaaa ttcccggagg atgtttttgg ccatctcgat gttgttctgg 300 gcaatgacca aagetttetg gatgteetgg taggagtace cetgaeteat gaggtteteg 360 atctcactgg agagctgagg tgagggcggt ggcagcagag gcggcaggac cactaccttg 420 ctgacagctg ccagctttcc gttcagagtt gattctccgc gggaatggtt ttggaggcct 480 ctcgggaact tgggaacctt cagtgacatt ttgtggttag ggatcccttt ccaggacaaa 540 cagaccaagg aagagetege atttgagata tetgagagag tteggeggge cateceggee 600 ggcacaggtg gctttgggac atcataccca tcatcctcat tttctgactc ctcqggacca 660 gtgttggctt gggctgcggc caaattccct tcaccaaagg tgctgctctc ggtgatagat 720 ggcgcctggg actgaatatt atacattgct tcatacgtac agctatcaat ctgctggtcg 780 caatcacatg ctcgtgaact ctgggatgta tccaaaggcc gtagaggcct ggaagaggga 840 gtcatgtact ctgtgtcctc ttcaccctca cattgctccc caggtggcag ttttggcaca 900 ggaagaggtc tggcagccag agaataaatg gcattggcag atgaggaagg tttgattttg 960 gggtggtcac actctggacc tactaatggg ctgctattca tactcatgga ggtatccaga 1020 ctgaacgtgc ttccgagcct aggcacatct ggtctgggct ccatttgtga gggcaatgaa 1080 aatggaagtg agtgccggtt ggttaattct cttcctqtcc agggatcact ggaacttggg 1140 1200 gcagatactg gtactttggg gattggccgg ggcagccatg agtctccaag gcggctagag gggacagggg gcagtttgtc tctggaggga cagtcgcctg gtgtacaagg caaqqqqcqt 1260 ctttgaggtc gggattctgc tccaacagaa tatggccggt ctggaggcgg tggtggtgga 1320 agatetegaa gtgtgggagg taetggeaat ggtttgtett tatgaaggga geeagaagea 1380 gccttagaag cagttccaag agcagaagca cttgagggaa cacatactcg ctgcggcaga 1440 aggtcaagtc gtggtggcac cgggggaagg gaagcttgtg gggccatgga gaatggagaa 1500 ggcggccgtt ccaccttggc accagccaat tccttcatca tgaaqaqagt atcatcaqct 1560 cgttcatcat catcatcatc ataatttggg gagggagctc cctctgctcc ttgcctcaac 1620 aggetgecae teeetetagg ateaaaegga tetaceaega tgggtteagt acetttaatt 1680 tcacatcggc agaaaggaca gccctgacct tctgattcct gccaggatgt aagacaggat 1740 gtgcacatga ggtgtccaca gggctcaatc tttacatcct tatcattttc agcacatatt 1800 ttacatagtt ggaatgtgga gcccatctca cagtataatt catattgttc ctgggtcact 1860 ttgatatggt cttggggagt tggttcacat aagccagtca gatcaggatt ctgatttcgt 1920 ccatcaggaa acaaatagaa gccttccctg aagccatcaa tcagtgcttg gaagagaggt 1980 ttattgtgag ggattgtctg gagaatgttc ccatcagcag taacataccc aatagcccac 2040 tgacccagac gagtacagct cagccggaag atataactgc caggtttgtg aatgaatttc 2100 tggagccgag ctttcacttc gtcatacgtc aaaaaagcca tgtagccagg atgagttaca 2160 gcaaggctgt tccaattcct gagcaaagag gaccagggct gaaagagtcg ggtaaagatg 2220 tcaaattcaa aaaccgaaat ataatcattg caggtcagat caatagtgga tttcaqagcc 2280 atggcctcca gcccagaact gatgggatgc acttcatgta gagcctgtcg aaagctcttc 2340 caagggacta ttgtcttttc cccaaaagct tttctccaaa attccgcaqc atctqcttta 2400

```
gtaatccgaa atgtgtctcc ctgaaagagt ccacttggaa agattccttt tagttctgcc
                                                               2460
agcatgtggc tgaagatgag ggacagtttg gttaggtttc gcctaggctg agaattctcc
                                                               2520
tcatacattc tttctttcc ctccttgaag aggcttatgg tttgcttagt tttcttcatc
                                                               2580
aaattctcca taaacaccct aaaatactca ttttctccaa gtgtctccat cttcccctca
                                                               2640
tatcttgaca agatagtacg gagatgctgg taggtatctg gtagcaggtc taagatataa
                                                              2700
ggtgggctat tetttagege cagetttggg ttetgacaca acegeaceae ettgtecatg
                                                              2760
agettecage aettetecae catettettg tecacegtee eeggegggtg ggggetgagg
                                                              2820
tggtggtggt ggtggtggtg cggctggaag gcgtccttca tgagcccaat caggccaccc
                                                              2880
gaaccegage ecceggagee getgeegeee eeggeeceag agetettett caegttgeeg
                                                              2940
3000
gagggagaga agcagggcgt gaaggaggga cgaaa
                                                              3035
```

```
<210> 5737
<211> 1832
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1782)...(0)
<223> similar to gi1006659 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5737
tttttttttt ttgaaggaaa ggaactttca atgagaaatc aaaacacagg ggaaccaaag
                                                                       60
tgcaaatcat ccaccccca tgggggggcc aatcctgaac cccacatcat cccctcagcc
                                                                      120
cccttcaggc ccccagcgca ggcccagggc tcggatgctt ctgcctcagg tagctcttga
                                                                      180
gctgggggca ggcctctctg ggactccagt tcctcgaagg gtagacggca gggagcttga
                                                                      240
agcccattca ggcctagggt gccgttccct caggggccct tcgagcccag tcaggcaccc
                                                                      300
gggccgtccc ggcagtaaat gcccagccgt tcccgcaaca ccagcaccac cctctgggca
                                                                      360
agggtctcga gtagtggcgc tagaggcagc ctgggccctg tgggcaggac ccttggtggg
                                                                      420
tatggcagga aggggtcctg ggtcctcacg ggaagcacag caccagagct gctggcgcac
                                                                      480
agcaggaagt ctgtgcagta gcctggaggc acagtcaggt cctggcggta tttctcctcc
                                                                      540
cccagcaget ggcgcaaccc ctcagctact atgtccttgt gactgtactt gcagcgggca
                                                                      600
eggteggtga tgagaggetg gggaaagatg ggeaettget geettegggg aaggegggga
                                                                      660
ccccggtatc ctgggagctc cagctccacg gccgtgtcca gcagggagag gtagcgacgc
                                                                      720
acaatcagag catgaggggt gccactgatg tagttgatga agccagggga aaaaacaaag
                                                                      780
tgcagggctc tgaagggcag gcaccgcagt tggcacagtg acatcaagat gttgactgta
                                                                      840
gccaggggtg ccacccctgc ttcccgagcc aggatectet caaggcaggg cataaactgc
                                                                      900
tgttccaggg gcaggtagtt cagtcgccca aagggcagga ccaacttctg taccaccttg
                                                                      960
ctgctgagtt gcgtttcctg aaccaccagg aagtgggcaa tggcttccag aagctggggc
                                                                     1020
tecegeaace ggtgeeggge eaggtgetgg geeaggagea ceateaegtg gggagteagt
                                                                     1080
teetetggee ttgeetetge caggetgetg atcagatget geegtggata eegeagaaaa
                                                                     1140
cgggggcagc ttagagcagc ttccaaccct tgcccacctc ggagaagggg ctgcaaaggg
                                                                     1200
ggaggtggct tcggagggag gcggagcctt cgctcctgtt ccagggcaca caccagggga
                                                                     1260
ccatcagatg gaaagccaag taagactgca aggtgcagac acacgtggat ggtgtgaatg
                                                                     1320
tcaaaggagg ggcagtttcg gatgatgagc tgactcaagt cctgcagtgt gacctgctcc
                                                                     1380
acaggagggg gccgtggccg agaccccaag agctggccca gacgacgaag cgccaccgag
                                                                     1440
tagtggtggg cgcgcacctt gctggggttc tggcccagcc agcgcagcag ctccccaggg
                                                                     1500
ctettegeet gttecagaag eegetgeagt eettgeaeag gaeetgeaet ggggeeteet
                                                                     1560
```

```
ccaacaggcc ggtccccca tttgctggc cccaaacagc agggctgtac tggagggatc 1620 agcagcaggc cagacagccg agcagggag gtctgagcag agagcaggac tcgaagcatg 1680 gagttgggtg atggagacca tgactcccg ggccctgcgc aggtcgctcc ctcagtcggt 1740 ctcggggccc gggggccggg ttccccccgc ggcctcctca tcggctagcc accgagtccg 1800 ccatcttccc cctcgtgccg aattcgaatc ga
```

```
<210> 5738
<211> 1651
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1539)...(498)

<223> similar to gi5281034 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5738 ttttttttt ttcagtgaaa ttgaattttt attccaaatg actaatatct agaaaggcag 60 tagctaacac tcaaaacaat ttgtttaagt gtaaattaaa agcagttgat ttgcaggaga 120 gcaaacagtg gggtagtggc catggcactc tgatcatggt tatatccaag aaagcataaa 180 ataaccaatg teetgatatg caatetggat gtgcagcatt tacagcaaac aacataaaaa 240 gaaagaaaga agaatggaaa agaaaagaag aaaaaaacca ccacaaagtc ccaaacctca 300 gaaattaaca ttcacttaag aacacagtgg tgaagacttt tggtagcaaa atctgcacgg 360 ttcttaaaat gggagtcttc aaaagtactt cttcaaattc aaaagctaag aaaaccaaag 420 agggaacagt tacacaggct tagtggagat gccgcctgtc atgaagatga ccatcagtcc 480 tacttcccag acacagtgag aaccggtgag cctgacgaac ctgaaggaaa aggccggctg 540 acgggtgctg atgccactga ctatacaaga acacaccggg tcaactcatc attgacagcg 600 agagacacac tactgctcct cctggctgat gccaaggctg cctttctgca cctcaagctc 660 ctcggcactg accattgatg ggtcaatggc cgcgtatttg gttccatgga attgcagcaa 720 atgtatctgt acataaagat tgacctctgc acttctgcac aggtatggga aattgcctcc 780 tgttttcaga tgagctcttc gggcattagg atacagcttg tacatttctt ctttagcttc 840 agttgaaagc gcactctgat caaacacatc cataatagtt acaggtatgt cccgaatttt 900 atgaggttcc acataagaat tttgacaatt caaggtaagt cttgaagcca gttcactctg 960 acccaaactt tctagcctgt ctaccatgaa atcaatggca tcagccatca tagggtccac 1020 cgggccagat gaaaaatttc caagaactat ttttttgagc ataaatgcag gcatcagcca 1080 aaagctgttt gcagtccaag tttggttgaa gatagaggtg tcactgaagg aattgcagag 1140 gattagggaa tggactctag gagatttgtg agtgtattca gcaaatttct gggccaaaaa 1200 gcctcccaaa gaagcgccaa aaagatgaac tttatccaat tgtaaatggt ctaaaagttt 1260 tctgaatcca tcacagaact cgagatggtc ccaataaact ggatactgca aagcgataac 1320 ccggtaaccc catccagtca gagccaaaat ctgccggaaa aagacatctg cagttccact 1380 gacagggggc aggaatatga gaggacacct gatacttcgg gggcccgcgt catagagcga 1440 ccatatetta etgteateat catecacaat aatettttta aggggaactg tacetetaaa 1500 ccagttataa tcaggagaga ctttaatctc tcccatgatt agctgaaatg gaggttaatc 1560 ctgccgtggc cgccccacg tcccttcccc tccttcagga ggccgctctt cgctccagta 1620 cgagcgcggg ccgtggaggc ggctgggccc q 1651

```
<210> 5739
     <211> 3019
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(3020)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (2664)...(345)
     <223> similar to gi2347131 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5739
ttttttttt ttgtggaaac cattgatttt tattaatttc ataactgcgg aaattccatg
                                                                       60
tgaaagtgaa acaagcgatg agtcaagtca accagggaag gaatctgggg acaggccaaa
                                                                      120
ggagcgggag gtggggcagc gaggcagtcc tgctggtagg agccctgaac atttcccaqa
                                                                      180
cttgtgtgcc gctcgctctg gcatcctaga gacccggatt tactcagcta ggagagaga
                                                                      240
ttggatcaca aggttctaag ggtggcccat tcagaaggta gaaaatggag gggccgqcaq
                                                                      300
attctggcag ggcaagcaaa agggctcaag tggccattgg ctaggagggg taaaaaaatt
                                                                      360
caggacatcc ccccagggtg ctgcctcagc caagggcttc attgcgggaa gatgattgat
                                                                      420
gtgaaagttc tcgtgggcgg cgggaccttt gctacggagg ggcccttttt tggggagttt
                                                                      480
ttgtccagca gagccaaggc agggggttgt aaaagacccc agctgcacca gaccccacct
                                                                      540
gcagataacc tgaatctccg ctcaaggaaa acctgctccc ccagaattct cacttgcagg
                                                                      600
ggacteteat ceteetgggg teacaetgea taaggaaetg ggtetgteae caeetteeet
                                                                      660
gacatcctgt caagttgggg aaccatggtt tttttcttgg gagacaaccc tcggcaacag
                                                                      720
cttgtccact ccactcccat tcttaaggtt aaatgttcca gtttgctccc attccaaggc
                                                                      780
gaccaaaatg tgcagagaac actctgtttg ttccagccag ttcattctca tggtccccta
                                                                      840
caggtgctgc ctttgaaggt ctcccgcaag aagccaagat tggcctccca tcgtgcaagg
                                                                      900
gaaggcaaga tgggccctgg caatgggtgg aacatcttta ctttctgggc cagcttcaag
                                                                      960
cagagetatg teaateacea tagaacteee aggatteeet ggttettttt ggeaaagaea
                                                                     1020
tcaaaccctg gggagatcac cgccttctca ataaggaatt ctttgcccca ctgggatttg
                                                                     1080
gggtctccca cattgaccct ccacagggag tggtcgttgc catcgcggaa gcaatgagct
                                                                     1140
gctgtcagga cccattggtc ggagatgagg gccccccggg cagggtctct tggctcttgg
                                                                     1200
gettaatagt gaeatgeeag ggtgteetet eetggteaga ggegtttget gaeatgttee
                                                                     1260
ccaccccgca gatggtgtct gtgagcttgg agacatccag catatgttca aagacctggt
                                                                     1320
gcagageett tgtgteetge agaatgaagg catgeetete accateette ttggaeeeta
                                                                     1380
gctcattcag ttctctccag tccacatcca gcttgcccac cccgatggca tagatgtcca
                                                                     1440
gatagtcatt cctcttctgg ttgatgttca ggatctctct gatatggtca acagctgtct
                                                                     1500
tgggagagcc acccatatgg gactttccca tctgtcaaga aggatgatgg catgtcggat
                                                                     1560
ttcctgccca gnccatcgtt tccatgccga ggagtcgcat ttggttgttc atcatgagat
                                                                     1620
agacactgtt taaggccgca taggtgttag tcccagttcc attttcatga tctttatagt
                                                                     1680
tggcattttc caggetgetg atcaceteag teatateeeg ggagttgteg tteaggaeag
                                                                     1740
acatgaggac tttgggctct gaggcaaagg tgataatggc aacgctcaca ttgatctcaa
                                                                     1800
agctgaagat cctgtccacc atgagggagg cgctctcctt gaagatgaga aagtcatttt
                                                                     1860
ccgacacact ctgcgaacag tccaggagca ggtagaggtt cagatgacca gagcgctgga
                                                                     1920
tttggatttt acggcccagg ctttcctttg tcttctqqqt qqqattqqtq qccccaagca
                                                                     1980
tgtgggagaa ggaagtgccc agggcagggg ccacqtcctc agggaagtca taagagtagg
                                                                     2040
```

2100

2160

gttggcggca gatgggctcc gttccactcc agaccccgtt gccctggcac tcccqctccq

aagaccccgt gagcacaaga ttcgaggagc agcgatagcg gaccttgtcc ccatgaccaa

<210> 5740 <211> 1617 <212> DNA

<213> Homo sapiens

```
ageggaagee tgteegeact tggeeeaagt gaaatgeetg ggttggggea gtggeeagee
                                                                     2220
ccattatcac acacagctgt ttctccatcc cacatgccgt tggggcgaca ctgacgcaca
                                                                     2280
ggcgagcccc gcaattatga agccatcctc acactcgaag ctcacattgc cacccacggg
                                                                     2340
ataggacccc agccgtgggg tataaatgcc attctcaaag gagacagggg ctggacagcg
                                                                     2400
cacaggtttg cagaccgcct tagacagaga ccgggtggct cctggggtct gccactgtcc
                                                                     2460
gctgctcttg cacagccgtg atgctgggga tgggtacagg ccctgggggc aggagtaggt
                                                                     2520
gagaaggete ecaggageee agecatgget gagggtgaag gtgecaeeeg agatatteae
                                                                     2580
gttctgaggg caggagggag ccgagtctgc cagacctggg tacaggaaca gcaggcaaaa
                                                                     2640
aagaaccatc agtgggccca tggtgtcctc cctaggggcg gcgagaggta gagagccgcg
                                                                     2700
ggagggaaaa ggtcatctga cttcccgaaa actagagctg ggtcagcagc tgcttcattg
                                                                     2760
ctgccagaga agaaaaacca gggagtggca agggggatgg tcttctgtta gggaaataat
                                                                     2820
aagcagggat tggggactga actgaagggt gaaacctttg ccctgtctcc ctgatgctaa
                                                                     2880
tatatctata gggtcaatag atctccccca caggctttgt gtactgcctc cacgctccac
                                                                     2940
ccacccatgc gtgcacatgt gcaccataca cgcatgctct caaacacgca ggcaagcaca
                                                                     3000
tattggggag ttccccagc
                                                                     3019
```

```
<220>
     <221> misc feature
     <222> (377)...(972)
     <223> similar to gi5726238 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5740
ttagcagcaa gtgctgtttc ctggggcagg ggcaagtacc cctcaacccc ttctccttca
                                                                       60
cccttagcgg caagtcccgc tttcctaggg ggcaagaacc ccccaatcgc ttatttccgc
                                                                      120
cgcaccccaa cctcttatct ctgtgcccca atcacttatt tctgcaccct gacctcttat
                                                                      180
ctctgtgccc caatccctta tttccctgcc ccaacccctt ctctgctttc ctggagggca
                                                                      240
agaaccctcc gccccttctc cctgtctcta ctcttttctc tgggcttgct ccttcactat
                                                                      300
gggtaagett ccacceteca tteeteette tteteeetta geetgtgtte teaaaaactt
                                                                      360
aaaacctctt caactcacac ctgacctaaa acctaagtgt cttattttct tctgcaacac
                                                                      420
cgcttggccc caatacaaac tcgacaatga ttccaaatag ccagaaaacg gcactttcga
                                                                      480
gttctccatc ctacaagttc tagataattc ttgtcataaa atgggcaaat ggtctgaggt
                                                                      540
gcctgacgtc caggcattct tttacacatt ggtccctccc tagtctctgc tcccaatgtg
                                                                      600
actcatccca aatctttctt ctttctctcc tttctgttcc ttcggtctcc accccaagtt
                                                                      660
ccgagtcctc tgaatccttc ttttctatgg actcatctga cctccccct tctccccagg
                                                                      720
ctgctcctcg ccaggctgag ccaggtccca attctcactt agcctctgct cccccaccct
                                                                      780
ataatccttt tatcacctcc cctcctcaca cctggtccag cttacagttt cattccgtga
                                                                      840
ctagecetee eceteetgee cageaattta etettaaaaa ggtggetgga getaaaggea
                                                                      900
tagtcaaggt tagtgctcct ttttctttat cccaaatcag atagcgttta ggctcttttt
                                                                      960
catcaaatat aaaaatccag cccagttcat ggctcatttg gcagcaaccc tgagatgctt
                                                                     1020
tacagcccta gaccctaaaa ggtcaaaagg ccgtcttatt ctcaatatac attttattac
                                                                     1080
ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca
                                                                     1140
caacaggatt taattaacct cgccttcaag gtgtacaata atagaaaaaa gtttcaattc
                                                                     1200
cttgcctcca ctgtgagaca aaccccagcc acatcttcca gcacacaaga acttccaaac
                                                                     1260
```

1320

ggctggaccg gcagcagcca ggcggttcct ccagaacctc ctcccacaqq aqcttqctac

```
<210> 5741
<211> 867
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(357)
<223> similar to gi288145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5741 gatttttcaa gtactgctat ttttaaaaaa tccaccagag gcagaggctc ctgcctgtaa 60 taccagcact ttgggaggct gaggtgggag gatcgcttga ggccaggagt ttgggaccag 120 cctgggcggc gtggcgagag accctgtctc tacaaaaaat aaaatttaaa aaattagctg 180 ggcgtggagg aggcatgcac ctgtggtctt ggatacttgg ggggctgagg caggaggatc 240 acttgggccc gggagatcga ggctgcagtg agccgttatt gtgccactgt actccagcct 300 ggacagcaga acaagaccct gtctcaaaaa aaacaaaaac aaaacaaaaa aaatcctggc 360 attttcatca catttcatca ttggaatagc cttactgtat ggatagtgcc cataatttta 420 aaataatttt taaataatta ttgcttaatc agataattgc taaagtaaaa tttcccaaat 480 tttgctttca catcgacatt tatttgctat cactgagttt gtacccctaa tccattaaaa 540 agtagaaaac agtgaaatag ggcatttgtt ctaagtaatg ggagaagatg taactggaga 600 agatggaaaa aagttgtaag aaccactgct ctgtataggt tgtaaaagca gtattaaata 660 tggtgcctgc ccttgctaaa ggtaacatga agtaataggt agggtaaatg cactcaqctg 720 tgtgggttgc ttgaaagatc ttgtgagcct gttcactctt gcagttgaaa gactggatca 780 cttctttctg gcgttgttta tttttatgca gactccagcc tggacagcag agcaggaccc 840 tgtctcaaaa aaaacaaaaa caaaaca 867

```
<210> 5742
<211> 1722
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (268)...(1208)
<223> similar to gi6002700 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5742
agettecage ccagteggee eggeeegggg gecatggage teegagegge ggategegag
                                                                       60
cctcctgcga accccagcct gcacgcccgg ttaqcattcq qccqqqaqat qcqqcaqtqq
                                                                      120
aatctggaag ggcggtgaaa aacctacgtc ctgccctcgc ccggcctctc cattcgtccc
                                                                      180
ccgggtagag aggtgcccgg ctcccacccc ttcccagccc cagccctgga gacagcagcc
                                                                      240
cctagactac tgagggacag cgacagcatg aaggctccgg qtcqqctcqt qctcatcatc
                                                                      300
ctgtgctccg tggtcttctc tgccgttcta catcctcctg tgctgctggg ccggcctgcc
                                                                      360
cctctgcctg gccaacctgc ccctggaaca accaacttcc ccaacaggct cccaggcccc
                                                                      420
actgtgcccg ggacccctgc aacttcaagt ggaataatag cagtgtgcca agatgggaaa
                                                                      480
gccgctggtc ccgcgaagcc cctgccgcaa gctgtgcccg tggtgtccca gctccggccc
                                                                      540
aaatgctggg ctcaggccct gggtgctgag atcgacagtg cccgagtgcg tgttccgcat
                                                                      600
gaaccaggcg ccccaccgtg ggctttgaag gcggaatgtt gggcccagcg cagcaccctg
                                                                      660
cgtgtcgtct cacacacaag cgtgccgctg ctgctggcgc aactattcac actacttcca
                                                                      720
gaaggcccga gacacgctct acatggtgtg gggccagggc aggcacatgg accgggtgct
                                                                      780
cggcggccgc acctaccgca cgctgctgca gctcaccagg atgtaccccg gcctgcaggt
                                                                      840
gtacaccttc acggagcgca tgatggccta ctgcgaccag atcttccagg acgagacggg
                                                                      900
caagaaccgg aggcagtcgg gctccttcct cagcaccggc tggttcacca tgatcctcgc
                                                                      960
gctggagctg tgtgaggaga tcgtggtcta tgggatggtc agcgacagct actgcaggga
                                                                     1020
qaaqaqccac ccctcagtgc cttaccacta ctttgagaag ggccggctag atgagtgtca
                                                                     1080
gatgtacctg gcacacgagc aggcgccccg aagcgcccac cgcttcatca ctqaqaaqqc
                                                                     1140
ggtcttctcc cgctgggcca agaagaggcc catcgtgttc gcccatccgt cctggaggac
                                                                     1200
tgagtagett cegtegteet gecageegee atgeegttge gaggeeteeg ggatgteeca
                                                                     1260
tcccaagcca tcacactcca ctccctgagt aattcatggc atttgggggc tcaccccacc
                                                                     1320
tocaggicity toaagtggcc titgtccctg gggctgatgg cccccaactc accagcatca
                                                                     1380
tgaccttgtg ccagtcctgg tcctccctcc ccagccgctc ctaccacctt ttggtgccac
                                                                     1440
acttctcagg ctggccgccc tggttggggc agccgagagc ctggggttca ttgqtqaaqq
                                                                     1500
ggccttggag ttgtgactgc cggggccgta tcaggaacgt acgggtaaac gtgtgttttc
                                                                     1560
tggatgctgt ctctagcgtg gtcatgtgtc tgatgtgttt aggggtggag atgagggttt
                                                                     1620
ctttccctgt cacagaccca gaagcatttt ttttttggga agggggtttt ttcttttcc
                                                                     1680
ccacccgggt attgctgggg gccccttttg gcttatttag gc
                                                                     1722
```

```
<210> 5743
<211> 9502
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(9503)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1430)...(3051)
<223> similar to gi4773880 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5743

```
atgcagtggt cagtgataat ggaatacttg aaagtaatcc cctcactcca ggaactagtg
                                                                     60
ctcagctagc agaactaata gccctcactt gggcactaga attaggagaa gaaaaaaggg
                                                                     120
caaatatata tacagactct aaatatgctt acctagtcct ccatgcccat gcagcaatat
                                                                     180
ggaaagaaag ggaattccta acttctgaga gaacacctat caaacatcag gaagccatta
                                                                     240
ggaaattatt attggctgta cagaaaccta aagaggtggc aqtcttacac tqccqqqqtc
                                                                     300
atcanaaagg aaaggaaagg gaaaatactt ttgcctgcaa ctatccaatg gaaattactt
                                                                     360
aaaaccette atcaaacett teaettagge atcgatagea eecateaaat ggeeaaatea
                                                                     420
ttatttactg gaccaggcct tttcaaaact atcaagcaaa tattcagggc ctgtgaattg
                                                                     480
tgccaaaaaa ataatcccct gcctcatcgc caagctcctt caggaaaaca aaaaacaggc
                                                                     540
cattaccctg aaaaaaactg gcaactgatt ttacccacaa gcccaaacct cagggatttc
                                                                     600
agtatctact agtctgggta aatactttca cgggttgggc aaaggccttc ccctgtagga
                                                                     660
cagaaaaggc ccaagaggta ataaaggcac tagttcatga aataattccc agattcggac
                                                                     720
ttccccgagg cttacagagt gacaatagcc ctgctttcca ggccacagta acccagggag
                                                                     780
tatcccaggc gttaggtata cgatatcact tacactgcgc ctgaaggcca cagtcctcag
                                                                     840
ggaaggtcga gaaaatgaat gaaatactca aaggacatct aaaaaaqcaa acccaqqaaa
                                                                     900
cccacctcac atggcctgct ctgttgccta tagccttaaa aagaatctqc aactttcccc
                                                                    960
aaaaagcagg acttagccca tacgaaatgc tgtatggaag gcccttcata accaatgacc
                                                                    1020
ttgtgcttga cccaagacag ccaacttagt tgcagacatc acctccttag ccaaatatca
                                                                    1080
acaagttett aaaacattae aaggaaeeta teeetgagaa qagggaaaag aactatteea
                                                                    1140
cccttgtgac atggtattag tcaagtccct tctctctaat tccccatccc taggatacat
                                                                    1200
1260
tggctggagt ggtcttggat acatcacact tgagtcaaat cctggatact gccaaaggaa
                                                                    1320
cctgaaaatc caggagacaa cgctagctat tcctgtgaac ctctagagga tttgcgcctg
                                                                    1380
ctcttcaaac aacaaccagg aggaaagtaa ctaaaatcat aaatccccca tggccctccc
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ttatcatatt tttctcttta ctgttctttt accctctttc actctcactg cacccctcc
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cggaaatatt gatgccccat cgtataggag tctttctaag ggaaccccca ccttcactgc
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ccacacccat atgccccgca actgctatca ctctgccact ctttgcatgc atgcaaatac
                                                                    1680
tcattattgg acaggaaaaa tgattaatcc tagttgtcct ggaggacttg gagtcactgt
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ctgtcggact tacttcaccc aaactggtat gtctgatggg ggtggagttc aagatcaggc
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aagagaaaaa catgtaaaag aagcaatctc ccaactgacc cggggacata gcacccctag
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cccctacaaa ggactagttc tctcaaaact acatgaaacc ctccgtaccc atactcgcct
                                                                    1920
ggtaagccta tttaatacca ccctcactgg gctccatgag gtctcggccc aaaaccctac
                                                                    1980
taactgttgg atatgcctcc ccctgaactt caggccatat gtttcaatcc ctgtacctga
                                                                   2040
acaatggaac aacttcagca cagaaataaa caccacttcc gttttagtag gacctcttgt
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ttccaatctg gaaataaccc atacctcaaa cctcacctgt gtaaaattta gcaatactac
                                                                   2160
atacacaacc aacteccaat geateaggtg ggtaacteet eecacacaaa tagtetgeet
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acceteagga atattittig teigiggtae eteageetat egitgittiga atggetette
                                                                   2280
agaatctatg tgcttcctct cattcttagt gccccctatg accatctaca ctgaacaaga
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tttatacagt tatgtcaata teetaaagee eeegeaacaa aagagtaeee attetteett
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tcgaagagct ttagacttgc taaccgctga aagaggggga acctgtttac ttttagggga
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agaatgctgt tactatgtta atcaatccgg aatcgtcact gagaaagtta aagaaattcg
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agatcgaata caacgtagag cagaggagct tcgaaacact ggaccctggg gcctcctcag
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ccaatggatg ccctggattc tccccttctt aggacctcta gcagctataa tattgctact
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cctctttgga ccctgtatct ttaacctcct tgttaacttt gtctcttcca gaatcgaage
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ggaccggcct gctagcccac gatctgatgt taatgacatc aaaggcaccc ctcctgagga
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aatctcagct gcacaacctc tactacgccc caattcagca ggaagcagtt agagcggtcg
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tcggccaacc tccccaacag cacttaggtt ttcctgttga gatgggggac tgagagacag
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gactagetgg attteetagg etgaetaaga atecetaage etagetggga aggtaaceae
                                                                   3180
atccaccttt aaacacgggg cttgcaactt agctcacacc cgaccaatca ggtagtaaag
                                                                    3240
agagctcact aaaatgctaa ttaggcaaaa acaggaggta aagaaatagc caatcatcta
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ttgcctgaga gcacagcggg agggacaatg atcaggatat aaacccaggc attccagcca
                                                                   3360
gcaacggcta ccctctttgg gtcccctccc tttgtatggg agctctgttt ccactctatt
                                                                   3420
```

```
aaatottgca actgcactot ottotggtoo gtgtttgtta oggattgago tgagottttg
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cttattgtcc accattgttc tttgccgctg ttgcagacct gccactgact tccatcctc
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tggatcctgc agggtgtccg ctgtgctcct gatccagcga ggcgcccatt gccqctcccq
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atcgggctaa aggcttgcca ttgttcctgc acggctaagt gcctgggttt gttctaattg
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agctgaacac taatcactgg gttccatggt tctcttctgt gacccacggc ttctaataga
                                                                     3720
actataacac ttaccacatg gcccaagatt ccattccttg gaatccgtga ggccaagaac
                                                                     3780
tccaggtcag agaatacgag gcttgccacc atcttggaag cggcctgcta ccgtcttgga
                                                                     3840
agtggttcac caccatcttg ggagctctgt gagcaaggac cccccggtaa cattttggca
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accaacgacg gacatccaaa gtgatgggaa acgttccccg caagacaaaa acgcccctaa
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gacgtattct ggagaattgg gaccaatttg accctcagac actaaggaaa gaaacgactt
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tctttgatct gacatggaga gatatatatg tcactgctaa atcagacact aaccccaaat
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gagactaagg gaggcattga ggaagcgtgc ctctctgtca cctgactctt ctgaagqcca
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tgttagggag agacattcta gcaaaagcag gggccattat acacctgaac ataggagaag
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acctecttte ectaceaaag geagtaceee eteagaceea aggeeeaaea aagggettee
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aaaagattgt taaggactta aaagcccaag gcttagtaaa accatgcata actccctgca
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gtaattccgt agtggattga ggaggcacag aaacccagtg gacagtggag ggttagtgca
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agateteagg attateaatg gaggeegttg teettttata eecagetgta eetageeett
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cttcaaaccc aacatctcaa ctcacctgga ctgttttacc ccaagggttc agggatagcc
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cccatctatt tggccaggca ttagcccaag acttgagcca atcctcatac ctggacactt
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gccacccaag cgctcttcaa tttcctcgct acctgtggct acatggtttc caaaccaaag
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gctcaactct gctcacagca ggttacttag ggctaaaatt atccaaaggc accagggccc
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tgccaacagg gcaagacttt tcttcatatg tcacagaaaa aacaggaata gctctaggag
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teettacaca gateegaggg atgagettge aacetgtgge gtacetgaet aaggaaattg
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```

```
atgtagtggc aaagggttga cctcattgtt tacgggtagt ggtggcagta gcagtcttag
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cagccacatt tcttccagac aatgaagaaa agataaaaca taactgtcaa caagtaattt
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ctcaaaccta tgccactcga ggggaccttt tagaggttcc tttgactgat cccgacctca
                                                                                                                7200
acttgtatac tgatggaagt tcctttgtag aaaaaggact tcgaaaagtg gggtatgcag
                                                                                                                7260
tggtcagtga taatggaata cttgaaagta atcccctcac tccaggaact agtgctcagc
                                                                                                                7320
tagcagaact aatagccctc acttgggcac tagaattagg agaagaaaaa agggcaaata
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taatacagac tctaaatatg cttacctagt cctccatgcc catgcagcaa tatggaaaga
                                                                                                                7440
aagggaatte etaaettetg agagaacaee tateaaaeat caggaageea ttaggaaatt
                                                                                                                7500
attattggct gtacagaaac ctagagaggt ggcagtctta cactgccggg gtcatcacaa
                                                                                                                7560
aggaaaggaa agggaaatac aagagaactg ccaagcatat attgaagcca aaagagctgc
                                                                                                                7620
aaggcaggac cctccattag aaatgcttat taaacttccc ttagtatagg gtaatccctt
                                                                                                                7680
ccgggaaacc aagccccagt actcagcagg agaaacagaa tggggaacct cacqaggcag
                                                                                                                7740
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                                                                                                                7800
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                                                                                                                7860
tcagatggcc aaatcattat ttactggacc aggccttttc aaaactatca agcagatagt
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cagggcctgt gaagtgtgcc agagaaataa tcccctgcct tatcgccaag ctccttcagg
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agaacaaaga acaggccatt accctggaga agactggcaa ctgattttac ccacaagcc
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aaacctcagg gatttcagta tctactagtc tgggtagata ctttcacggg ttgggcagag
                                                                                                                8100
gccttcccct gtaggacaga aaaggcccaa gaggtaataa aggcactagt tcatgaaata
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atteccagat teggaettee eegaggetta cagagtgaca ataqeeetqe tttecaqqee
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acagtaaccc agggagtatc ccaggcgtta ggtatacgat atcacttaca ctgcgcctga
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aggccacagt cctcagggaa ggtcgagaaa atgaatgaaa cactcaaaqq acatctaaaa
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atctgcaact ttccccaaaa agcaggactt agcccatacg aaatgctgta tggaaggccc
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ttcataacca atgaccttgt gcttgaccca agacagccaa cttagttgca gacatcacct
                                                                                                                8520
ccttagccaa atatcaacaa gttcttaaaa cattacaagg aacctatccc tgagaagagg
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aaaagaatat tccacccaag tgacatggta ttagtcaagt cccttccctc taattcccca
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aaagtggctg gagtggagtc ttggatacat cacacttgag tcaaatcctg gatactgcca
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aaggaacctg aaaatccagg agacaacgct agctattcct gtgaacctct agaggatttg
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cgcctgctct tcaaacaaca accaggagga aaaatcgaag ctgtaaaact acaaatggag
                                                                                                                8880
cccaagatgc agtccaagac taagatctac cgcagacctc tggaccagcc tgctagccca
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catgctccga tgttaatgac atcgaaggca cccgtctcga ggaaatctca actgcacaac
                                                                                                                9000
ccctactaca ccccaattca gcaggaagca gttagagcgg tcgtcagcca acctccccag
                                                                                                                9060
cagcacttgg gttttcctgt tgagagcggg gactgaaaga caggactagc tggatttcct
                                                                                                                9120
aggetgaeta agaateeeta ageetagetg ggaaggtgae tgeateeace tttaaacaea
                                                                                                                9180
gggcttgcaa cttagctcac acccgaccaa tcaggtagta aagagagctc actaaaatgc
                                                                                                                9240
taattaggca aaaacaggag gtaaagaaat agccaatcat ctattgtctg agagcacagc
                                                                                                                9300
gggagggaca atgaccggga tttaaaccca ggcattcgag ctggcaacgg ctaccctctc
                                                                                                                9360
tgggtcccct ccctttgtat gggagctctg ttttcactct attaaatctt gcaactgcac
                                                                                                                9420
acticticting tengtheting that the agent agent agent tengtheting the account of the action and the action and the action and the action action and the action action
                                                                                                                9480
ctgtttgctg ctgtcgcaaa cc
                                                                                                                9502
```

```
<210> 5744
<211> 1682
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (676)...(1265)
<223> similar to gi854065 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5744
teetteegee atgettggea egaggegeag aaggetgeag geectatagg ggaegaeggg
                                                                       60
ctggggacgc cctgagcttc ctggctgtgt ggcaggtgct ggggaagctc tctgggccat
                                                                      120
agggacetgg eteceetetg agaggeeege etgeeetggg acaeecaggg etgtgetggt
                                                                      180
ggcctgaggc tgggaacttg ggttcctggg ctctgctggc gcctgggctt tgtgggggcc
                                                                      240
gaaggtggtt gccccgccgg qcagggggct gtgtqqqccc tcgtqqqqcc accttcctqt
                                                                      300
cagtgcccga gggacggtgg gacagttgcc cctgcgccaa gggaqcccac tqccatcccc
                                                                      360
cgtgggctgg cgctgcagtc gcgcaccctg tgttgcctgc tgacttqctt atqtctqttt
                                                                      420
ggaagetget tetgtttgge cacaggeetg tgtteetggg ttgatggeea cagagetgae
                                                                      480
acttggggtt tgagttccag acttgcagac cctgggatcc gcttactcct ccgcgccacg
                                                                      540
gctgctgtgc ttccagaggt ggcgtgatgc ctcccggggc cacqqtqqqq tqaaqqatgq
                                                                      600
cgagccggac ataccattgt tggatgtatt ttttttaaaa cagcaataat tagccatttt
                                                                      660
aaaggaggga tgtacctgtg tgtgtgcatg tgcacgtgtt tgagcgtgtg tgtgtgtgtg
                                                                      720
caagtgggtt cttggatatg tgtagtgtga gcatgtgtgc atgtgtgagc ctgtgcacgt
                                                                      780
gcatgttgta ggtgcataag catgtacacg cgtgagcatg catgtgcqtg tacacgtgta
                                                                      840
taggtgtaca tgtgcatgag ttgtgtacat gcgtgagcac gtgtatagat gtacgtgtgt
                                                                      900
gtgcgcatgt gtgcgtgtac atgtgtttgt gtcttgggta tgcataagca tgcacgtgtg
                                                                      960
tatgaatgtg cgtgtgtatg catgagcacg tatgcatgtg tgatgcgcat gttcttgtgt
                                                                     1020
acttctctga gggggcacat atgtatgagt gtatgagtgc atacatatgc atatggtgta
                                                                     1080
cgtgtgtgta ctttgtgtgt gggcatgtat gcgtatgagt acttgtgtgt ggctggtgta
                                                                     1140
tgggtgagca tgcacatgtg tatggatgca tatgtgagct gtacatgtag agtgtacatg
                                                                     1200
tgtgttgcat gagcatgcat gcgtgcgagt gcctgtgtgt gtacttgcat atatgtggct
                                                                     1260
gtgcaggtac ccggcggtgg tgggctggca gtgcccgggg aagcaggtcc tgctcacgqc
                                                                     1320
ttccctgctg ggccccaggc cccgggctga gcctccctgg cccctcttgc ccctcaqtqq
                                                                     1380
agcagggcct gggtggaggg cctgggcagc tccagggcag gtccggggag gccaggcttg
                                                                     1440
gggagcacag ggggtggggt tcacctgctg ctgtttgttc ccgaaactgt actgtgagcc
                                                                     1500
cacggcgggg ggcagattgt tttgaggccc cagatgtgcc aaaacagccc ccagggtggg
                                                                     1560
ggcgagcgag ttttgaggag aggggctgcg ggggccgggg gtgggtgtgt gcccctccc
                                                                     1620
tgaatggccc ccaatgctgc tgtttttcaa taaaaccaga gttgaaggca aaaaaaaaa
                                                                     1680
aa
                                                                     1682
```

```
<210> 5745
<211> 1145
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (177)...(771)
<223> similar to gi5706452 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5745

```
aactgttccc tactgatacc ctaggcagtg tggtggaatt cattgcttaa tccccaggag
                                                                       60
cccagttcct gtgggcagcg cctgacatgc ctgatcctct cttttctgca gttcaaggga
                                                                      120
aagacgagat cttgcacaag gcactctgct tctgcccttg gctggggaag ggtggcatgg
                                                                      180
agceteteeg getgeteate ttactetttg teacagaget gteeggagee caeaacaeea
                                                                      240
cagtgttcca gggcgtggcg ggccagtccc tgcaggtgtc ttgcccctat qactccatqa
                                                                      300
agcactgggg gaggcgcaag gcctggtgcc gccagctggg agagaagggc ccatgccagc
                                                                      360
gtgtggtcag cacgcacaac ttgtggctgc tgtccttcct gaggaggtgg aatgggagca
                                                                      420
cagccatcac agacgatacc ctgggtggca ctctcaccat tacgctgcgg aatctacaac
                                                                      480
cccatgatgc gggtctctac cagtgccaga gcctccatgg cagtgaggct gacacctca
                                                                      540
ggaaggtcct ggtggaggtg ctggcagacc ccctggatca ccgggatgct ggagatctct
                                                                      600
ggttccccgg ggagtctgag agcttcgagg atgcccatgt ggagcacagc atctccagga
                                                                      660
gcctcttgga aggagaaatc cccttcccac ccacttccat ccttctcctc ctggcctgca
                                                                      720
tettteteat caagatteta geageeageg ceetetggge tgeageetgg catggacaga
                                                                      780
agccagggac acatccaccc agtgaactgg actgtggcca tgacccaggg tatcagctcc
                                                                      840
aaactctgcc agggctgaga gacacgtgaa ggaagatgat gggaggaaaa gcccaggaga
                                                                      900
agtoccacca gggaccagoo cagootgoat acttgocact tggocaccag gactoottqt
                                                                      960
tctgctctgg caagagacta ctctgcctga acacttgctt ctcctgggac cctgggaagc
                                                                     1020
agggacttgg tttgagggga gttggggagg ttgtaagaac accttgacaa tttcttgaat
                                                                     1080
attttggaca ttttaaacac ttacaaataa atccaagact gtcatattta gctggaaaaa
                                                                     1140
aaaaa
                                                                     1145
```

```
<210> 5746
<211> 1242
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (872)...(244)
<223> similar to gi2370153 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5746
ttttttttt ttctatttaa tagtgtctga catttattaa aaataaggaa aaaacctttg
                                                                   60
tacaggtagt gtattagagc agggaaggga gcagggctta ctgtgttgaa caaaaggcac
                                                                  120
ccatcagaga gacagctgca aattcagaag aaaacaggat tctaggcaaa actaactggt
                                                                  180
ccacaggaga aaatgagaga ttcgatttgg ttgccaggca cacttaagcc ctggcagcta
                                                                  240
tgtggcagga acacaagagg tctctgggga tgggggggaa atgggtctcg ctgaaggtga
                                                                  300
caggeteett gggggaegge cagetgtetg gateactgte caggggetgt gtecageteg
                                                                  360
gataccteeg aggtgagtee acateactag gageeacagt etgttggtga gatgeggtgg
                                                                  420
atggcgatgg cagtggtagc gtaggtctgt gggcagaatg atgtagttgg ctggcagtct
                                                                  480
ggaggagtgg aggtgggttg gcagcagcgg ctgtgggtgg tctgtccagt atgtaacagg
                                                                  540
600
gcaaaagagg gcggaggcag cgcgctctag agtgcggccc aggagctgca gcaggagcct
                                                                  660
ggagcgctat tcctggaaca aaggcaagca ctacgcggga ggggacagga qcqcaqqqqa
                                                                  720
catcgcggcg gctcgagggg gagggaggcg cggagggagg gcgcctgtgg agaccctagc
                                                                  780
ggtggccact ggcacagcga actettecca gageaceege eeceaggeee aagggtetee
                                                                  840
cggcctagaa gtcctcgtcc tcctcccatc caaagacccg cttcatctcg gccaggaagc
                                                                  900
cccggtaatc attgagcagg gggctctcct tcctgatgta ggggatcacc cactgcaggg
                                                                  960
ctggccccgt gaggcgggtg atgaggaacg tcaccttcag ggcgtcgttg gagaacgtqt
                                                                 1020
```

```
tctcgtccac gaacatgtag gagctcgtct gcacgatgaa ctccgggagt cggtcggtat 1080 ctccgtcaaa cgtctcggga aagggaatcg ggttcctcca gcgacgcgc gcgggccgga 1140 ggggcccggc caggagggcc ttcatcagct gcacccgacc gtccatcgtg ccgcgcgcc tccgaagagt tacgctggg tcagcgctaa gg 1242
```

```
<210> 5747
     <211> 922
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(923)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (638)...(922)
     <223> similar to gi1389766 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5747
aattgagacc ctttgcatgt gatggcattc acaaggcaaa ttacttqctq aaaqaatgcc
                                                                       60
aagggtcgga gcagttggag ctctatatga tggtgccagc tgtgggcagc atggtgacta
                                                                      120
ggttggaagt ggcatgtgga gttgtcaggc accacctgcc atttaacttc tcattttct
                                                                      180
agtttgaaaa tggtatgagc ttcgttcttc ctttcagatc catgagacaa tagaaaccat
                                                                      240
caaccagctg aagactcagc gggagttcat gctgagcttt gccagagacc ctcagggttt
                                                                      300
catcaatgac tggcttcagt cccagtgcag ggacctcaag gtaaagaacc tangagaggt
                                                                      360
ctgaagggac ttangtcagt gaggtgcaca gctgctttat tcatgtagca gctggtagga
                                                                      420
gacccagagg aaggagtgag gggccagatt tttctttagc atgttccagg gtccattttg
                                                                      480
caattaagca gggaaatggg ggcagagcca tcaagtgttg atttagtgct tactttgtct
                                                                      540
gtcactgtgc ttcatcttgt cagggataca gagtggaaga cctgatctct gctttcaaag
                                                                      600
cagoctacat totgtotgaa gaaactaggo tagtatagoo gggcatggtg gotcacacot
                                                                      660
gtaatcccag cactttggga ggccgaggcc gacggatcgc ttgaggtcag gagtttgaga
                                                                      720
ccagcctggc caacatggcg aaaccccgtc tccactaaaa atacaaaaac ttaqctqqqc
                                                                      780
gtggtggtgc accettgtaa teecagetae tggggagget gaggcaggag aatggettea
                                                                      840
ttgaacccag ggaggcagag gttgcagtga gccgagatcc gtgttactgc gctccagcct
                                                                      900
```

```
<210> 5748
<211> 3556
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

qqqqtqacaa gcaagacttc ag

922

<222> (155)...(3198) <223> similar to gi220826 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5748 cgacgatttc gtgtgggacc aacggacgga cggacggacg cgcgcaccta ccgaggcgcg 60 ggcgctgcag aggctcccag cccaagcctg agcctgagcc cgccccgagg tccccgcccc 120 gcccgcctgg ctctctcgcc gcggagccgc caagatgggg gacaagaaag atgacaagga 180 ctcacccaag aagaacaagg gcaaggagcg ccgggacctg gatgacctca agaaggaggt 240 ggctatgaca gagcacaaga tgtcagtgga agaqqtctqc cqqaaataca acacagactq 300 tgtgcagggt ttgacccaca gcaaagccca ggagatcctg gcccgggatg ggcctaacgc 360 acteacgeea cegeetacea ceceagagtg ggteaagttt tgeegacage tetteggggg 420 cttctccatc ctgctgtgga tcggggctat cctctgcttc ctggcctacg gtatccaggc 480 gggcaccgag gacgacccct ctggtgacaa cctgtacctg ggcatcgtgc tggcggccgt 540 ggtgatcatc actggctgct tctcctacta ccaggaggcc aaqagctcca agatcatgga 600 gtccttcaag aacatggtgc cccagcaagc cctggtgatc cgggaaggtg agaagatgca 660 ggtgaacgct gaggaggtgg tggtcgggga cctggtggag atcaagggtg gagaccqagt 720 qccaqctgac ctqcqgatca tctcaqccca cqqctgcaaq gtqqacaact cctccctqac 780 tggcgaatcc gagccccaga ctcgctctcc cgactgcact cacqaqaaac cctttgaaqa 840 ctcggaacat caccttcttt tccaacaact ttgtagaagg cacggctcgg ggcgtggtgg 900 tggccacggg cgaccgcact gtcatgggcc gtatcgccac cctggcatca gggctggagg 960 tgggcaagac gcccatcgcc atcgagattg agcacttcat ccagctcatc accggcgtgg 1020 ctgtcttcct gggtgtctcc ttcttcatcc tctccctcat tctcggatac acctggcttg 1080 aggetgteat ettecteate qgeateateg tggceaatgt eccagagggt etgetggeea 1140 ctgtcactgt gtgtctgacg ctgaccgcca agcgcatggc ccggaagaac tgcctggtga 1200 agaacctgga ggctgtagaa accctgggct ccacgtccac catctgctca qataaqacaq 1260 ggaccctcac tcagaaccgc atgacagtcg cccacatgtg gtttgacaac cagatccacg 1320 aggctgacac cactgaggac cagtcaggga cctcatttga caagagttcg cacacctggg 1380 tggccctgtt ttgacatcgc tggggttttg caatcgccct gtcttcaagg gtggtcaqqa 1440 caacatccct gtgctcaaga gggatgtggc tggggatgcg tctgagtctq ccctqctcaa 1500 gtgcatcgag ctgtcctctg gctccgtgaa gctgatgcgt gaacgcaaca agaaagtggc 1560 tgagattccc ttcaattcca ccaacaaata ccagctctcc atccatgaga ccgaggaccc 1620 caacgacaac cgatacctgc tggtgatgaa gggtgccccc gagcgcatcc tggaccgctg 1680 ctccaccatc ctgctacagg gcaaggagca gcctctggac gaggaaatga aggaggcctt 1740 ccagaatgcc taccttgagc tcggtggcct gggcgagcgc gtgcttgqtt tctqccatta 1800 ttacctgccc gaggagcagt tccccaaggg ctttgccttc gactgtgatg acgtgaactt 1860 caccacggac aacctctgct ttgtgggcct catgtccatg atcggcccac cccgggcagc 1920 cgtccctgac gcggtgggca agtgtcgcag cgcaggcatc aaggtcatca tggtcaccgg 1980 cgatcacccc atcacggcca aggccattgc caagggtgtg ggcatcatct ttgagggcaa 2040 cgagactgtg gaggacatcg ccgcccggct caacattccc qtcaqccaqq ttaacccccq 2100 ggatgccaag gcctgcgtga tccacggcac cgacctcaag gacttcacct ccgagcaaat 2160 cgacgagatc ctgcagaatc acaccgagat cgtcttcgcc cqcacatccc cccaqcagaa 2220 2280 gctcatcatt gtggagggct gtcagagaca gggtgcaatt gtggctgtga ccggggatqq tgtgaacgac tcccccgctc tgaagaaggc cgacattggg gtggccatgg gcatcgctgg 2340 ctctgacgtc tccaagcagg cagctgacat gatcctgctg gacgacaact ttqcctccat 2400 cgtcacaggg gtggaggagg gccgcctgat cttcgacaac ctaaagaagt ccattgccta 2460 caccetgace ageaatatee eggagateae gecetteetg etgtteatea tggeeaacat 2520 cccgctgccc ctgggcacca tcaccatcct ctgcatcgat ctgggcactg acatggtccc 2580 tgccatctca ctggcgtacg aggctgccga aagcgacatc atgaagagac agcccaggaa 2640 cccgcggacg gacaaattgg tcaatgagag actcatcagc atggcctacg ggcaqattgg 2700 aatgatccag gctctcggtg gcttcttctc ttactttgtg atcctggcag aaaatggctt 2760 cttgcccggc aacctggtgg gcatccggct gaactgggat gaccgcaccq tcaatqacct 2820 ggaagacagt tacgggcagc agtggacata cgagcagagg aaggtggtgg agttcacctg 2880 ccacacggcc ttctttgtga gcatcgttgt cgtccagtgg gccgatctga tcatctgcaa 2940

```
gacccggagg aactcggtct tccagcaggg catgaagaac aagatcctga tcttcgggct
                                                                    3000
gtttgaggag acggccctgg ctgccttcct gtcctactgc cccggcatgg acgtggccct
                                                                    3060
gcgcatgtac cctctcaagc ccagctggtg gttctgtgcc ttcccctaca gtttcctcat
                                                                    3120
cttcgtctac gacgaaatcc gcaaactcat cctgcgcagg aacccagggg gttgggtgga
                                                                    3180
gaaggaaacc tactactgac ctcagcccca ccacatcgcc catctcttcc ccgtcccca
                                                                    3240
ggcccaggac cgccctgtc agtccccca attttgtatt ctggggggag gagccctctc
                                                                    3300
ttcctgtggc cccaccttgg ccccacccc ctccactatc tcctgccgcc cccactctgg
                                                                    3360
ctggcttctc tcccctgccc caaacctctc tcctctctt tttctgtgtc agtttctctc
                                                                    3420
cctctcctca cccctctatc cattcctccc gccccagcca cctccctggg ctcttttta
                                                                    3480
ctccccttca gcccccggc tgatgccatc tctggttctg gacaattatc aaatatatca
                                                                    3540
qqqqqaaaa aaaaaa
                                                                    3556
```

```
<210> 5749
<211> 2242
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (75)...(1360)
<223> similar to gi595380 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5749 tgctgccagg gcgccgggcc cggggaggcc ggggtctcgg gtggccgccg gcccaggcgc 60 tggacggcag caggatgggg aaggcgaagg tccccgcctc caagcgcgcc ccgagcagcc 120 ccgtggctaa gccgggtcct gtcaagacgc tcactcggaa gaaaaacaag aagaaaaaa 180 ggttttggaa aagcaaggcg cgggaagtaa gcaagaagcc agcaagcggc cccggtgctg 240 tggtgcgacc tccaaaggca ccagaagact tttctcaaaa ctggaaggcg ctgcaagagt 300 ggctgctgaa acaaaaatct caggccccag aaaagcctct tgtcatctct cagatgggtt 360 ccaaaaagaa gcccaaaatt atccagcaaa acaaaaaaga gacctcgcct caagtgaagg 420 gagaggagat gccggcagga aaagaccagg aggccagcag gggctctgtt ccttcaggtt 480 ccaagatgga caggagggcg ccagtacctc gcaccaaggc cagtggaaca gagcacaata 540 agaaaggaac caaggaaagg acaaatggtg atattgttcc agaacgaggg gacatcgagc 600 ataagaagcg gaaagctaag gaggcagccc cagccccacc caccgaggaa gacatctggt 660 ttgacgacgt ggacccagcg gatatcgaag ctgccatagg tccagaggcg gccaagatag 720 cgaggaaaca gttgggtcag agcgagggca gcgtcagcct cagcctcgtg aaagagcagg 780 ccttcggcgg cctgacaaga gccttagcct tggactgtga gatggtgggc gtgggcccta 840 agggggagga gagcatggcc gcccgtgtgt ccatcgtgaa ccagtatggg aagtgcgttt 900 atgacaagta cgtcaaacca accgagcccg tgacggacta taggacagcg gtcagtggga 960 ttcggcctga gaacctcaag cagggagaag agcttgaagt tgttcagaag gaagtggcag 1020 agatgctgaa gggcagaatt ctagtggggc acgctctgca taatgaccta aaggtactat 1080 ttcttgatca tccaaaaaag aagattcggg acacacagaa atataaacct ttcaagagtc 1140 aagtaaagag tggaaggccg tctctgagac tactttcaga gaagatcctt gggctccagg 1200 tccagcaggc ggagcactgt tcaattcagg atgcccaggc agcaatgagg ctgtacgtca 1260 tggtgaagaa ggagtgggag agcatggccc gagacaggcg ccccctqctq actqctccaq 1320 accactgcag tgacgacgcc tagcagtcct gccctgctgc tgctgccgcc ccgctacaga 1380 ggcaatgtga ccagtcacag ggacagatca catctcccca gagtggcaac tctggtgaaa 1440 ccttttcaga atcatggcag aggggcgtgg cgtggtgcta ctgagaaggt cctccttcct 1500 cttgactttg tggtctgaaa cctggtctta ctgtccatgt gtgtttgggc ccggatggtc 1560

```
agggtgggga gcagggacgg ccatgggcac gcctggccac gctttaccga ctgctgaccc
                                                               1620
cctgggccag gtgaggttgg ggcctgtggg ccgccagtcc atacggtgct gtcactgccc
                                                               1680
atctteggtg acaccetggg gtgaggtgct cagcaccttc ctctegagga gccacatttt
                                                               1740
cctcctttgt gttaggggac ataacaagct ctgctgggct tgagggaccc agaccaggtg
                                                               1800
tetgeagtea geteetgaga cacagetgge eggeacaaca ggtgttacat eaggggttte
                                                               1860
1920
ggtcacccag cagaggette tececatage acgaggatgt gttgeetggg caeggtgaet
                                                               1980
geggttatte etggaggteg geagacatge caacettggg etatttgage tggagaaget
                                                               2040
atgtgatgct agccggtggc tttctgggct aggccccaqt ttgaggctcc cctgggaact
                                                               2100
agagccagga acagccagtg gcactgacaa qqqqacqqaq tccaaqqcqt tattqqqcca
                                                               2160
cctgacagct ggacagaaaa ggggcagaca caccgaggat gcgatttaaa ataaatgcag
                                                               2220
atgtttactt ggaaaaaaaa aa
                                                               2242
```

```
<210> 5750
<211> 2329
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2330)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2194)...(801)
<223> similar to gi470340 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5750 tccccacctg aacctgtggt taccaatgct atgcgagaag acctggcgga tatctgttac 60 atcagggctg tgaccgtcta cgacaagccc gcatctttct ttaaagagac acctctggac 120 ctgcagcacc ggctcttcat gaagctgggc agcatgcact ctccgttcag ggcccgctca 180 gaacctgagg acccagtcac ggagcggtcg gccttcacgg agcgggatgc tgggagcggg 240 ctggtgacgc gtctccgtga gcggccagcc ctgctggtca gcaqcacqaq ctqqacaqaq 300 gacgaagact tctccatcct gctggcagct ttagaaagta gagtttgaac aactgactct 360 tgatggacac aaccttcctt ctctcgtctg tgtgataaca ggcaaagggc ctctgaggga 420 gtattatagc cgcctcatcc accagaagca cttccagcac atccaggtct gcacccctg 480 gctggaggcc gaggactacc ccctgcttct agggtcggcg gacctgggtg tctgtctgca 540 cacgtcctcc agtggcctgg acctgcccat gaaggtggtg gacatgtttg ggtgctgttt 600 gcctgtgtgt gctgtgaact tcaagtgttt acatgagctg gtgaaacatg aagaaaatgg 660 cctggtcttt gaggactcag aggaactggc agctcagctg cagatgcttt tctcaaactt 720 tectgatect gegggeaage taaaccagtt eeggaagaac etgegggagt egeageaget 780 ccgatgggat gagagctggg tgcagactgt gctccctttg gttatggaca cataactcct 840 gggccagagg ctaaaacccc aggacccctg ctgtccttcc cgcagcttct tcttggagtc 900 tcagggcaaa ccctttcgag cagcacctcc cagtggccag aagctgaaat gacagcagtg 960 gtactgcctg gtaaaagaat tggttctgtg acccgggaag ctttggttgg ccttgatttc 1020 ttctctggag gcttggaaac gcttcctctc ttcttctgtt cttcacqccc catqcccctq 1080 ctagcgtatt actgttctgt gacttccctg tgacctctgc agaactcctc atcctgcgtt 1140 tggtctccag gtgtcccctt tctgccgtgt tcctaacatt ttgattcctg tcttgaaaaa 1200

```
agcacctgct gcaccgtaag cccagggatg tggcagctgc agtgggcttg gctttgtgag
                                                                     1260
gaactgagtg tgtccacgtt gggggaacat catacttgat acacacgttt ttatttgcac
                                                                     1320
aaagaaaatg ctgtttttgg agccagaatt ttcatgtctg atttatggtg attttcttaa
                                                                     1380
gaaccagaac tgctggcaga aagggggcac ccacacgctt agatagccga tgtcttatta
                                                                     1440
gagggcagtt tgtggttcct gatttggaaa ttaacattct ccaaacattc cagtccaatg
                                                                     1500
aaagttttat ccgctttccc atataaaaat tcttcccatg agagtgactt gattctcaca
                                                                     1560
atcccgttgg agtcgtgtt gagtcctaca gtattaggtt cagcattgcc atctccaagt
                                                                     1620
qctcttcqta qqqaaacagt ttctqgtcat gacaagcttc cacttcccat ctgatcccgg
                                                                     1680
cccggccggc ctctgcccga gttccctgca tggtgtggga gtgtggggca tgctagcttt
                                                                     1740
acqccggcgc ccagttcttt cacttccact ggagtcctgc agggacagct cggggaccat
                                                                     1800
gcaggcccgg gtgggcgtgg ggactcaact agctcagtgg tgaacagctg gcacgtctqt
                                                                     1860
gggttgtgga cggtaaaggc cacgtagacc tcaggagccc gctggtgctc ccggcaggca
                                                                     1920
gccagcctcc gcaggacccc gaccagcgac acgatggctt ctgggcaata caqcacqtca
                                                                     1980
gcaaatagct ccggtggccc tgggtggact ccttggccat cagggtctcc gccagcacct
                                                                     2040
cgtacagete atecaaagge tetgtgtgga cageetegtg etttttgatg agttetgaga
                                                                     2100
gaaagcaccg ggcatacttg actgacggcg ggtgcttcac acacacagga tgcttcacag
                                                                     2160
tctacttctg caaaatatcc cgcagcagct cagaatctga tgagtctctt aactttgctt
                                                                     2220
ctaagctctg ccaggggaag gagcgcaggg cgcgcgccgc caggaaqcqq cqcttgaaac
                                                                     2280
tctgcagcaa gagttcgctc cccgacgaaa tcgtcggtnn nngaaaaag
                                                                     2329
```

```
<210> 5751
<211> 2166
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2167)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1382)...(1928)
<223> similar to gi433011 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5751
tttttttttt ttattttaac aaatccaaag tttaattatt aaggattaca aatatttta
                                                                       60
gcagtgtagt taggcaatcc aagcctggac ttccacttca ttcctactaa actacttgca
                                                                      120
gagctgagga ggcaggagac tagagtacag agagcatttt agttctatca caaaggtcta
                                                                      180
gaactgtete tacagteaca ggaagaaaca ggtatggeac egtggeeaga agggggtagg
                                                                      240
tattcacaga gagtgggtat caaggtgtca aactttgtct tctgatagtt ttccagagat
                                                                      300
teetgtagag aagggageag ggagageeta etateegaaa eeatteeetg aaceetetga
                                                                      360
attotgaago atgtggattt otoagtottg ttotaccoat cocotttoco agotttotgo
                                                                      420
tectteceae teaeetttee tteeecetgg ceattttett ceteateaga gtetaaaace
                                                                      480
aagtccccta tggtaatgac ggagctgcac agagacggag gacacactgt aggagggaaa
                                                                      540
ccagaatcaa actactactt ctagatgaac acaggetett gagagteece aagagaggag
                                                                      600
gctgttgatc caatcctgac tcagactacc tacctggctt cctggcccta ggaggtaata
                                                                      660
atgatagtet cagggggtee atgtageaat eeaageaatt eetgaggtga gageaageaa
                                                                      720
agaggatagg atgaagggaa ggcaggcaaa gaatgtgctc ctagtaagaa gcaactctqt
                                                                      780
```

```
tecacteact cettttgete tgtggcagge aagteaactg ggtteteett cagageeett
                                                                      840
cccccaggg tctggcatgg actcttagac ttcccagtgg aggctgctct tgtgcccatg
                                                                      900
gctaggtctg ctgtgtatat cgcatgttct tccttgctct caggcttaga tatgacctqq
                                                                      960
gttggtgagc cgagattcct aaagggaaac agcatgactg tggggcgctc cttatggcct
                                                                     1020
cccctagtgg aggcccattg ggactgaact cttcqtcqqc ctaqaqqqqc caqattqaaq
                                                                     1080
tgtcggccag ctagaggttc tgggtgcgtc cttgaagatg gtccctgagg aagatgtgtg
                                                                     1140
ccaqqcttgg cttttggcag qqgattgtgg agtgctagtc tttgttgctg aggaggattc
                                                                     1200
tgttccatgg gctcagccag gttcactgag tcagtaacag agcactctgg aagcagccac
                                                                     1260
cccatgtcca caccatattg tctccaggca agagaagagg tgatagagac tccaggctgc
                                                                     1320
atccaactca gcacatcctg aagctgctgt gcctgcggtg taggcagtgc tttctccagc
                                                                     1380
tgacacaagt actcaaaaag cagcttttcc atggcagcca gaaagggttc cccatactct
                                                                     1440
tgttcaagtt cctgcagctt cgaggccaaa tccacaggag cctctgacag ctgcttcacc
                                                                     1500
tgctggtaaa aagtttcctg tgcctccaaa atcttcctca gatcctgctt tgtagccttg
                                                                     1560
ggatcccgca ctataggtcc agattctgga aagtggtgat tcagggcttt caggacttgg
                                                                     1620
gcccaaggcc ggccctgcag gatcagctcc accaccact tggcctttag gcccatacaa
                                                                     1680
aggcgttcgt ggtgccggta gcgaaccaag ccaggggcaa cagcgcgcaq agatcqcaqa
                                                                     1740
aactccagta ctcgcggaaa atgttccacg cagcgtccgc gcacaacctg ccagctagcc
                                                                     1800
gcggcggcga agcgtagagc tgcgggaccc gccaccaggg qcgtagccat qqtcqqcqqq
                                                                     1860
ctccgcccgg aggcggtccc tccgggttcc tcacccggat gggtgaggct ttccgatcac
                                                                     1920
tectagggge ggggettetg geaacteect gtegeteegg tetgtegget etgggtaeet
                                                                     1980
cgcgatctga ctcggctccc ttccatcggc ccccagaatt ctgggggagg gggtcttctg
                                                                     2040
gctcgggctg gaggagcctg agtggagaag ctgaccgtct ccagtggcac tgqqtcqctc
                                                                     2100
agctttaaac gtcgccgctg tctcgagccc gagggtgcct cacttccnnn ncgctactag
                                                                     2160
cttccc
                                                                     2166
```

```
<210> 5752
<211> 3136
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3137)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3125)...(730)
<223> similar to gi3273089 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5752
ttttttttt ttagattttc caactacaca gtttattaag taaagtatct caacaatatc
                                                                       60
tcagagcagt aaaaaccaag gcatccccaa acactgcatg cgtgacttag accagcaaag
                                                                     120
aagtcctcaa actttgcacc aagtcccaac attggccagc agggggcaag tggtgaagtc
                                                                     180
ttccggaacc caagtgcctt ggcgctgact ggcccccatt cgatgagtga gcttggatga
                                                                     240
cagggccggc ttggagatag gacaatcggc ttcacaggqt ccttttcatg tccqatcccc
                                                                      300
ttaagcattc ccgagggagc cacaaggaac ttgggggcgg tccgtgcaaa gcgtcggcat
                                                                     360
tgaacagggg gtctgtttgg gaggcttgaa tggctctggc tgcctctggg gtggccttca
                                                                     420
agccaaactg ggaaacgact tgtctataac ccctggggaa ctcgaagtgt tcgatgctca
                                                                      480
```

```
ctcgggaagc actgataacc ttccccatag gggaaacgac tcacaaacac aggactccgt
                                                                    540
cagtagtttc tgcagagaaa cttaaaatca tgaaaagggt catcaatcaa cagatctcag
                                                                    600
aagtcactgt gcagggacta ctgagggccg cqaqaqgaaq tqcaaacctc aqctqaaaaq
                                                                    660
caactcaggg tggctgagtg agccctcact tcccqqacca cccqcacqtq caqccaacac
                                                                    720
ctcccaacta cttgggccaa gtcggctctt cqcctccaaq tqqaqqctqc tqqqtctctt
                                                                    780
eggteteete etegececaa gteetgttte teeetetggg egteggaace aacetetgeg
                                                                    840
gtgcggatca ttttcctttc gnccatgggg cggcgggcca atgagagcct caatgtccct
                                                                    900
caatagttta tcacttcctt ttccagaagg gcgtttgcca qcgcctqcaa cttgtcccag
                                                                    960
gttgtcctgc agcaccttct cggtgtgtct gtaggccttg gccaccagca gtcttgcttc
                                                                   1020
atggtccatc atctgctgca ggccttggct gaaggggcgc cgcccgatgc ccatqaqqcc
                                                                   1080
ctcctgcgcc tcagggaagg agatgggccc gatgccaggt gccatcccaa actgcttcac
                                                                   1140
catggagtag gcgatgcggg tgaccttcct caggtcgtcc tgtgccccag aagtgacctc
                                                                   1200
gttgaaggac agtgcttccg aggcccgtcc tcccaaggcc atgcacatcc gctcaaacag
                                                                   1260
ctgctccttg gtgaagaggt gctggtctct ggggagcatc tgagcaaagc ccagggcggc
                                                                   1320
gtttgtccga ggggttatgg agaccttcat cacggcctcc gtgtgctcca gcatccagcc
                                                                   1380
caccaaggcg tggcccgact catgaaacgc aaccactttc tgttcttcct tggacaggat
                                                                   1440
cttgctcttt ttggcagtcc ctgcgaggac gcgctccacg gcgtactcga agttgagagt
                                                                   1500
gtgcacgaga agtgtgtccc taccgcgccg cqtqcaqcac agcctcttgc cagatgttgg
                                                                   1560
cgatgtcagc cccactgaat cctggtgtca gctctgccag acgctgggag taaaaggtgc
                                                                   1620
tggactgggt cagettcagg ctcttcaggt gctgctcaaa aatctcccgc ctctcctgca
                                                                   1680
gcgtggggag atcaatgaag acgtgccggt ccagtcggcc tggcctcatc agaqcaccqt
                                                                   1740
ccaaaatgtc agctcggttc gtggacgcca ggacgatgac atqqtctqtq qtacccattc
                                                                   1800
catccattta aaccagaagc tggttgagcg tctgctcctc ctccgtgttg gagaagccgg
                                                                   1860
acatggtggt ggagcgcttc ttgcccaccg cgtcgatctc atcgatgtag acgatgcagg
                                                                   1920
gggcccgggc tcgggcttcc ttaaagaggc tccgcacacg ggcagcgccg aggcctccaa
                                                                   1980
tgacctccac gaactctggg ccggccatcg ccaggaaggg cacctgagcc tccgtggcca
                                                                   2040
ccgccttggc cagcagcgtc ttcccacagc cgggggggcc gagcagcagt gcgccctttg
                                                                   2100
ggaccttggc gccaagctgg aggaagcgtt ctgggctctt cagataatcc acaaactcgc
                                                                   2160
ggacttccag tttggcttcg tgcattcctg ccacgtcttt gaagctgact cctttcccca
                                                                   2220
tcttcccatc cacaatggtg aaacgagcca ttttaagctg attaaaagca ctgaatccac
                                                                   2280
cttcccttcc agtcatcccg gccagacgga aaacatacca caggatggcc aggcccactg
                                                                   2340
ccgtcatccc cacagagtac agggcatttc caaagaatcc tgttcgcttg taggaaactg
                                                                   2400
ggatcctqtc cttggcctcq atattcaqct catcttcaqc tgctcqaaqc ttctcttcaa
                                                                   2460
acttgtcaat atttgcaacc tgcattcggt acatcaaggc tagccgaggc cgcccaaaca
                                                                   2520
ccacggetee agggtgeagg tagaetteea ccacgteget eteaggeace acetggaege
                                                                   2580
gctgcacctc gcccttggcc agcatctcgt ggacaaagtc gttccaggaa atgctqcctc
                                                                   2640
cgctggtgct gagagcattc aggaggctca tgacaaccgc gatgaccagc aaggtgcqca
                                                                   2700
2760
caggogoctt coccttogac ttatcettet cettattett etgetteaac ettgaggtgt
                                                                   2820
taaaatagaa agtaccacct aaaagttgcc agagtctgac tggattctga actaaatgtt
                                                                   2880
                                                                   2940
gtttcaacaa caatccgttg atcccttcaa aggtaggggt tagcagtctc aattgtaagc
tetgeagage teggeeteea geeteggega ggteeeeegg aggeetgetg geeatgtaeg
                                                                   3000
geogeeect ecegggeetg geggggaace etggaeteea ggeegggeet gggeeecaca
                                                                   3060
gcggccgagg acccgggcct ggaccccggc ggagggcacg gagcagcagc agcagcacgg
                                                                   3120
ccatgttggc ctgaaa
                                                                   3136
```

```
<210> 5753
<211> 2137
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (516)...(1278) <223> similar to gi5420389 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5753
ttttttttt ttctgtttat gacactttat tgatgctggg ggggtgggga ggagacctgg
                                                                     60
agaaatatgt gggggcaaga gtccccaggt ggggacaggg aaagtgttga agcctggcca
                                                                    120
ctactgggca gggaagacag agttgccact gtatgcacag gggatgagca gctqccqqta
                                                                    180
ctccaggggc aggtgccgct ccactagcac gtgcagtgag acttggtcag tgaccaggcc
                                                                    240
ctgccgccgc atcagcagct ccaggtcctc tggcttcaca gtcttgcggc cagcatgagc
                                                                    300
agcaaatacc tccagatcat cacaaagatg ctggaaatat ttatctaggc acttctccac
                                                                    360
catctcaaga gccttcctct ccatggggca tcttgggcat aagaagctaa aagagttttc
                                                                    420
acattagtgg ctcatatccc agccttgtgg ggatcttgcc ggggccctgg ggccggtggt
                                                                    480
ccggggccta gggggatgcc ctgaccaaca gaggctctgc aggctctgaa gataagactg
                                                                    540
cagcaccagg cgctggggct ggctcaagaa actgatgatg tcgcctggcc tggagagact
                                                                    600
660
aagatgetee tggeeegtea geeteageag teeeetggga teeetetget tetgteacet
                                                                    720
ctqtqtqtcc ctcagcctct tctaccctgc tgggtccttg tgctcctgtt gcctccattt
                                                                    780
cactcacact cacaccttct tcttccatct ttttctctgc ctcttcaact ccatcgtgta
                                                                    840
agggctctac ttcatcttct ccagagacac cactgctggt gctcaggaag cccagagcaa
                                                                    900
aggcattgac ctcctctgcc tctcctgcca gaaactgggc tggtttccca gggcctgagt
                                                                    960
gaaggggaga gaatacaggc cggagacgca gcaggccaag gctgcatagc tcagagaagg
                                                                   1020
gtaaagatgg accagcagac ccagtcctgc ccactgagga aagacaaagc cagaggcagc
                                                                   1080
accaggacat ggatctgaag tctcctggcc caacatggac tctgctcttg gatgaaggag
                                                                   1140
qcaqccacag ccagggtgct ctagggggcac agaggggctt gaggaaggaa aactaccatt
                                                                   1200
gtcaactctc acccaagcta aatttggctc caggccacca gtgccacaca ctcactattc
                                                                   1260
ttctgcagcc caggcccact gctctgtgtc ttgcgaccgg cagcctgctc agcgtcttca
                                                                   1320
gccccagtgt gaggcgtgca gggcagggag tgatacacgt tgggggagcc aaccatgggc
                                                                   1380
tgagagaacg gctgggtgtc ctccaacaca atgtttggag gagccaggga agtatctcgc
                                                                   1440
agatcccgca aaaaggcacc cacgtctaca gctcggcggg ctggaggtct gcgggccaag
                                                                   1500
ccaggcctct gcactgactg tggctgaaga ggtgtggcaa aggtcaggtt gagggatctg
                                                                   1560
gtgagggaag aggcatcagc attcccttga ggctcttggg agagagacag cccctggtcc
                                                                   1620
actocotgot gaaacactga cagtotoago ototgtttoo tootgooagg ggooagcaga
                                                                   1680
cctggagcca gggttgtggg gggctcgagc tcaggaagtt gcagctccag gctgccgcaa
                                                                   1740
ctgctctctt gtctggaggg ttggaccgcc tgcggtgctg gcactggctt cactaccgac
                                                                   1800
tcaggcatca ggatggaaga ttctggggca gttagtagga tgttcttcag cagcgtccga
                                                                   1860
ggtgtctgtt cctccaagtg cccactggcc tgaatatggg ccgatctgcc aacagacctg
                                                                   1920
gctccatggg aacgccctct ggctatcgtc cttgtttggc cactcaactt cctgggggaa
                                                                   1980
gccgtttcaa gcagggctct ccgggctcca gcccgagcac tccggggtcg ccgcgggtt
                                                                   2040
cqcqggtccq ctgtatccag cacgcgtcgc agcagcgtgc gcggcgtgga gtcgctgtca
                                                                   2100
gggttgtggt cagccatcgt ctcggccccg gacgaaa
                                                                   2137
```

```
<210> 5754
<211> 824
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (319)...(636)
```

<223> similar to gi3249069 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5754
ggggatgggg cctctatact tgcaagggag aggaacaggg accaggctgc cccacggtcc
                                                                       60
ctgaagggtc caaggagggg ccctccccat ggccctggag agtgggcctg ggtggtacct
                                                                      120
gctccaggca gggaaactgg gggctcgccc ttctcctgtg aggggagcca ggcacacagg
                                                                      180
gcccattggt gtttgggatg tggacagagg ggcagggggc tgggagaagg ctaagccgag
                                                                      240
gggtcctgtt tgtgcctccc tggcattttt tgcagacaag ggcttgggat ggaccctcag
                                                                      300
ccccatggta cgccctgccc agtttccaga tgccctgtcc acttacccta ggtagccccc
                                                                      360
caccccatca gtgccgagtc cttgtcccta cctccagctt cctccagcct caaaccgcct
                                                                      420
ctggatctag ctgtccttct ccgagtggca cgcctgcccc agggatgccc cctttccctc
                                                                      480
cccccatgc ccagagcccc gcctgcctca gcgggtcagg ccttcagaac actgccaccc
                                                                      540
acccagtttt ataatcccgc tccctctcca ggcaacccca cccaccagcc taggcctgct
                                                                      600
cetecaceet teeegggagg cageeeeggg atgetgagag ttggtggagg ggeeaggetg
                                                                      660
gacgetteet gtgggagtee eetecagace tggetggeee etggeageea cagaaaceae
                                                                      720
gatggcaaaa aatctcattg gttctcaagg actaacctgt gggggaaagc aatagagaca
                                                                      780
ctctttttct ctctttttt aaagatttat ttcttgaaat aata
                                                                      824
     <210> 5755
     <211> 1212
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1213)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (128)...(940)
     <223> similar to gi190510 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5755
ggccatagga aaaggcccgg cgtccacgcc tacctacagc cctgcaccca cccagccggc
                                                                       60
ccctagaatc gcgtcagccc cagagcccag ggtcaccctg gagggacctt ctgccaccgc
                                                                      120
cccagcetca tetecagget tggetaagee ccagatgeee ccaggteeet gcageeetgg
                                                                      180
ccctctggcc cagttgcaga gccgccagcg cgactacaag ctggctgccc tccacqccaa
                                                                      240
gcagcaggga gataccactg ctgccgctag acacttccgc gtggctaaga gctttgatgc
                                                                      300
tgtcttggag gccctgagcc ggggtgagcc cgtggacctc tcctgcctgc cccctccacc
                                                                      360
cgaccagctg cccccagacc caccgtcacc accgtcgcag cctccgaccc ccgctacggc
                                                                      420
gccctccaca acagaggtgc ccccacccc gaggaccctg ctggaggcgc tggagcagcg
                                                                      480
gatggagcgg taccaggtgg ccgcagccca qqccaaqaqc aaqqqqacc agcggaaagc
                                                                      540
tcgaatgcac gagcgcatcg tcaagcaata ccaagatgcc atccgagccc acaaggctgg
                                                                      600
ccgagccgtg gatgtcgctg aattgcccgt gcccccaggc ttccccccaa tccaqqqcct
```

660

```
ggaggccacc aagcccaccc agcagagtct ggtgggtgtc ctggagactg ccatgaagct
                                                               720
ggccaaccag gatgaaggcc cagaggatga agaggatgag gtgcctaaga agcagaacag
                                                               780
ccctgtggcc cccacagccc agcccaaagc cccaccctca agaactcccc agtcgggatc
                                                               840
agccccaaca gccaaagcgc cccccaaagc cacatccacc agagcccagc agcagctggc
                                                               900
cttcctagag ggccgcaaga agcagctcct gcaggccgca ctgcgagcca agcagaaaaa
                                                               960
1020
ggcctcgcgc aatgggctgc ctgttggacat caccaaggtg ccqcctqccc ctgtcaacaa
                                                              1080
ggacgacttt gccctggtcc agcggcctgg cccgggtctg tctcaggagg ccgaccqqcq
                                                              1140
ctatggtgaa ctcaccaagc tcctcgtgcc aagcaggccg tnntcatntt acagaggtat
                                                              1200
tcaggttcct ag
                                                              1212
```

```
<210> 5756
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     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (384)...(722)
     <223> similar to gi804809 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5756
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                                                                       60
acgttcaget aacttttaca ttttttttgt agagatagge tetcagtatg ttgeeetgge
                                                                      120
tggcctcgaa ctcctggggt caagcaatcc tcccaccgca gcctcccaaa gtgctaggat
                                                                      180
gacaggtgtg agccactgca ctgcaaaaat acagaagacc aaattattaa aactagaaat
                                                                      240
gagaggggac attactattg ttcttagaga cataaaaagg attataatat gaataaaaag
                                                                      300
gattatacat ataaacaata tatgctaata attggataga gctggatgaa aqacacatta
                                                                      360
ccagaaagat atgaactact gaatctgact tgagaaaaaa acagaaaagc tgaatagaca
                                                                      420
gacctatgtc aagtaaagag attgaggtag taatcaaaaa actttccact aagaaaagct
                                                                      480
gaagaccagc aggcagcctc actggtgaat ctaccaaata cttaaagaag aattaacacc
                                                                      540
aatccttcat aaagtctttc aaaatacaga tgaggaaaga acatttccta acttattcta
                                                                      600
tgagggtgat attaacctgg tatccaaact aaaqacatca cacacaaaaa attacagacc
                                                                      660
agtatttctt atgaatgtag atggaaaaat gcttgacaaa atctggcaaa ccaaattcaa
                                                                      720
cggagtattc tgtaaacatg aagcagataa taatag
                                                                      756
```

```
<210> 5757
<211> 2932
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (152)...(1752)
<223> similar to gi5834428 in the genepept database release 114,
```

## <400> 5757 agaaccacce gteeggeege etegagegeg gteetagegt teageggaet egegeggeet 60 cgatctctgg actcgtcacc tgcccctccc cctcccgccg ccgtcaccca ggaaaccggc 120 cgcaatcgcc ggccgacctg aagctggttt catggcagcc tcaaagaagg cagttttggg 180 gccattggtg ggggcggtgg accagggcac cagttcgacg cgctttttgg ttttcaattc 240 aaaaacagct gaactactta gtcatcatca agtagaaata aaacaagagt tcccaagaga 300 aggatgggtg gaacaggacc ctaaggaaat tctacattct gtctatgagt gtatagagaa 360 aacatgtgag aaacttggac agctcaatat tgatatttcc aacataaaag ctattggtgt 420 cagcaaccag agggaaacca ctgtagtctg ggacaagata actggagagc ctctctacaa 480 tgctgtggtg tggcttgatc taagaaccca gtctaccgtt gagagtctta gtaaaagaat 540 tccaggaaat aataactttg tcaagtccaa gacaggcctt ccacttagca cttacttcag 600 tgcagtgaaa cttcgttggc tccttgacaa tgtgagaaaa gttcaaaagg ccqttgaaga 660 aaaacgagct ctttttggga ctattgattc atggcttatt tggagtttga caggaggagt 720 caatggaggt gtccactgta cagatgtaac aaatgcaagt aggactatgc ttttcaacat 780 gtcattcttt ggaatgggat aaacaactct gcgaattttt tggaattcca atggaaattc 840 ttccaaatgt ccggagttct tctgagatct atggcctaat gaaaatctct catagcgtga 900 aagctggggc cttggaaggt gtgccaatat ctgggtgttt agggqaccag tctqctgcat 960 tggtgggaca aatgtgcttc cagattggac aagccaaaaa tacgtatgga acaggatgtt 1020 tettactatg taatacagge cataagtgtg tattttetga teatggeett etcaccacag 1080 tggcttacaa acttggcaga gacaaaccag tatattatgc tttggaaggt tctgtagcta 1140 tagctggtgc tgttattcgc tggctaagag acaatcttgg aattataaag acctcagaag 1200 aaattgaaaa acttgctaaa gaagtaggta cttcttatgg ctgctacttc gtcccagcat 1260 tttcggggtt atatgcacct tattgggagc ccagcgcaag agggataatc tgtggactca 1320 ctcagttcac caataaatgc catattgctt ttgctgcatt agaagctgtt tgtttccaaa 1380 ctcgagagat tttggatgcc atgaatcgag actgtggaat tccactcagt catttgcagg 1440 tagatggagg aatgaccagc aacaaaattc ttatgcagct acaagcagac attctgtata 1500 taccagtagt gaagccctca atgcccgaaa ccactgcact gggtgcggct atggcggcag 1560 gggctgcaga aggagtcggc gtatggagtc tcgaacccga aggatttgtc tgcccqtcac 1620 gatggaagcg gtttgaaacc tccagattaa tgccggaggg aaagtgaaat tccgttattc 1680 1740 tggtattcca taaaacctac caactcatgg attcccaaga tgtgagcttt ttacataatg 1800 aaagaaccca gcaattctgt ctcttaatgc aatgacacta ttcatagact ttgatttat 1860 ttataagcca cttgctgcat gaccctccaa gtagacctgt ggcttaaaat aaagaaaatg 1920 cagcaaaaag aatgctatag aaatatttgg gggttttttt tttttttaaa catccacagt 1980 taaggttggg ccagctacct ttggggctga cccctccat tgccataaca tcctgctcca 2040 ttccctctaa gatgtaggaa gaattcqqat ccttaccatt qqaatcttcc atcqaacata 2100 ctcaaacact tttggaccag gatttgagtc tctgcatgac atatacttga ttaaaaggtt 2160 attactaacc tgttaaaaat cagcagctct ttgcttttaa cagacaccct aaaagtcttc 2220 ttttctacat agttgaagac agcaacatct tcactgaatg tttgaataga aacctctact 2280 aaattattaa aatagacatt tagtgttctc acagcttgga tatttttctg aaaagttatt 2340 tgccaaaact gaaatcette agatgtttte catggteeca etaattataa tgaetttetg 2400 tctggatctt ataggaaaag atactttctt ttttcttcca tctttccttt ttatattttt 2460 tactttgtat gtataacata catgcctata tattttatac actgagggta gcccatttat 2520 aaattaagag cacattatat tcagaaggtt ctaacagggc tggtcttaag tgaaccactg 2580 tgtatataaa tatgttggaa aacagctgta tacatttttg ggcaacggtt atgcataata 2640 tttaccagga gaatttttt cttaacaagc caacatttaa aatttatgtt ttatgtcaat 2700 aaaagaaaat atactttatt gtgacttcaa ctatatttct tatcccttac atttttattt 2760 aattgtctta gcttaaaaaa agaagaaact gtggaatact acagtaaata ttgttttcaa 2820 acacaagcaa taattcaaat agttatttt cttttgaatt aattttagac atattttgga 2880 tcctattgag gggataagag gatgtcaaaa aagttaaata cctaagtaga aa 2932

```
<210> 5758
     <211> 777
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(778)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (519)...(107)
     <223> similar to gi493055 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
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                                                                       60
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                                                                      120
tggagctgcc ggcccccaag tacatgaatg tgcagatgat acacagattg tgcacccagc
                                                                      180
ttcccatcgt tgatcacaag tcggtatcca tctcccaggc cctcagcctt tgctgtctgc
                                                                      240
ttggccacaa ggagtaggtg tcctagaagc tatagagaga gcggagggac ataggtggct
                                                                      300
gctggtcttc ttcttcagcc tggctaatcc gaggaatggg cttcttagga atgaccagga
                                                                      360
agtgcacagg agcctgaggg gccacatcac ggaacacaag acactgctgg tcctcataga
                                                                      420
gaatgtcagc tgggaggctc ttgtccagga tccgggagaa gatggttggg gctgctcccc
                                                                      480
caggagttgc ctgctgggcc ttggccactt cattcccatc agtcacacct gcagctcctc
                                                                      540
ggacctgccc cccgcgcacc cccgtggccg ccacggctct gcgcgccgcg cgcaacccag
                                                                      600
cagccagcac cacggctgcc gccatcttcc ctgagccgcg ggaacctctc acccgggtca
                                                                      660
gcactcggct ccgcggccaa ccgtgggtgg ggactccggg cncggcgaac gcgtgggcgn
                                                                      720
acgentnete acceanngth naachnnthe taaattteee nnnaaagaaa geageet
                                                                      777
     <210> 5759
     <211> 6313
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (19)...(4020)
     <223> similar to gil665789 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5759
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                                                                       60
```

cagggccctg ttcaaactcc agcactgacc attcaccggc ggaagcggcg gcgcaggagg 120 eggeggegge ceagegggg cacacageag getetgttae caqetecage agtgqeqqee 180 agcgagaget aggcccgcgc ccggccggcg gcgctcgagg cggggaggga agttgcgggg 240 cegeegetee tgeeceeca acegggette etatttaceg aaageagagt eectegeete 300 teteggetet cacetgeegg ceetgetete eegegegagg gtteegegee egeeegeggg 360 ccgtaaggag cgggagaagg cggaagcggc cccgtggcca aagcacccgc caggcttccg 420 aggagaatat gaaactggtt gtcaaaatga catccagatt tgggaaaaca tacagtagga 480 aaggtggaaa tggcagttca aaattcgatg aagtcttttc caacaaacgg actaccctta 540 gcacaaaatg gggagagacc acatttatgg ctaaattagg gcagaagagg cccaatttca 600 aaccagatat ccaagaaatt ccgaagaaac ctaaagtgga agaagaaagt actggagatc 660 cttttggatt tgatagtgat gatgagtctc taccagtttc ttcaaagaat ttagcccagg 720 ttaagtgttc ctcttattca gaatctagtg aagctgctca gttggaagag gtcacttcag 780 tacttgaagc taatagcaaa attagtcatg tggtcattga agacactgtc gtttctgata 840 aatgcttccc tttggaggac actttacttg ggaaagaaaa gagcacaaac cgaattgtag 900 aagatgatgc aagcataagt agctgtaata aattaataac ttcaggtaaa gtggagaatt 960 ttcatgaaga acatgaaaag aatagtcacc atattcacaa aaatgctgat gacagtacta 1020 agaaacccaa tgcagaaact acagtggctt ctgaaatcaa ggaaacaaat gatacttgga 1080 actcccagtt tgggaaaagg ccagaatcac catcagaaat atctccaatc aagggatctg 1140 ttagaactgg tttgtttgaa tgggataatg attttgaaga tatcagatca qaaqactgta 1200 ttttaagttt ggatagtgat ccccttttgg agatgaagga tgacgatttt aaaaatcgat 1260 tggaaaatct gaatgaagcc attgaggaag atattgtaca aagtgttctt aggccaacca 1320 actgtaggac gtactgtagg gccaataaaa cgaaatcctc ccaaqqaqca tcaaattttq 1380 ataagctgat ggacggcacc agtcaggcct tagccaaagc aaacagtgaa tcgagtaaag 1440 atggcctgaa tcaggcaaag aaagggggtg taagttgtgg gaccagtttt agagggacag 1500 ttggacggac tagagattac actgttttac atccatcttg cttgtcagtt tgtaatgtta 1560 ccatacagga tactatggaa cgcagcatgg atgagttcac tgcatccact cctqcagatt 1620 tgggagaagc tggtcgtctc agaaaaaagg cagatattgc aacttctaag actactacta 1680 gatttcgacc tagtaatact aaatccaaaa aggatgttaa acttgaattt tttggttttg 1740 aagatcatga gacaggaggt gatgaaggag gttctggaag ttctaattac aaaattaagt 1800 attttggctt tgatgatctc agtgaaagcg aagatgatga agatgatgac tgtcaagtag 1860 aaagaaagac aagcaaaaaa agaactaaaa cagctccatc accctccttg cagcctcccc 1920 cagaaagcaa tgataattcc caggacagtc agtctggtac taacaatgca gaaaacttgg 1980 attttacaga ggacttgcct ggtgtgcctg aaagtgtgaa gaagcccata aataaacaag 2040 gagataaatc aaaggaaaat accagaaaga tttttagtgg ccccaaacgg tcacccacaa 2100 aagctgtata taatgccaga cattggaatc atccagattc agaagaactg cctgggccac 2160 cagtagtaaa acctcagagt gtcacagtga ggctgtcttc aaaggaacca aatcaaaaag 2220 atgatggagt ttttaaggct cctgcaccac catcccaaag tgataaaaac tgtgacaata 2280 cctactcagc cctaccaaga tatagttact gcactgaaat gccagacgag aagaccaaga 2340 attatatact gttgttcagc acgtgaagca cttcaacgat gttgtagaat ttggtgaaaa 2400 tcaagagttc actgatgaca ttgagtacat gttaagtggc ttaaagagca ctcagcctct 2460 aaacacacgt tgccttagtg ttattagctt ggctactaaa tgtgccatgc ccagttttcg 2520 aatgcacctg agagcacatg ggatggtagc aatggtcttt aaaaccttgg atgattccca 2580 gcaccatcag aatctgtccc tctgtacagc tgccctcatg tatatactga gtagagatcg 2640 tttgaacatg gatcttgata gagctagctt agatctaatg attcgacttt tggaactgga 2700 acaagatgct tcatcagcca agctactgaa tgaaaaagac atgaacaaaa ttaaagaaaa 2760 aatccgaagg ctctgtgaaa ctgtacacaa caagcatctt gatctagaaa atataacgac 2820 tgggcattta gctatggaga cattattatc ccttacttct aaacgagcag gagactggtt 2880 taaagaagaa ctccggcttt tgggtggtct ggatcatatt gtagataaag taaaagaatg 2940 tgtggatcat ttaagtagag atgaggatga agagaaactg gtagcctcac tatggggagc 3000 agagagatgt ttacgagttt tagaaagtgt aactgtgcat aatcccgaaa atcaaagcta 3060 cttgatagca tataaagatt cccaacttat tgtttcatca gctaaagcat tacagcattg 3120 tgaagaactg attcagcagt acaaccgtgc tgaggacagc atatgcttag ctgacagtaa 3180 gcctctgcct caccagaatg taactaacca tgtaggcaaa gcagtggagg actgcatgag 3240 ggccatcatc ggggtgttgc ttaatttaac taatgataat qaqtqqqca qcaccaaaac 3300 aggagagcag gacggtctca taggcacagc gctgaactgt gtgcttcagg ttccaaagta 3360 cctacctcag gagcagagat ttgatattcg agtgctgggc ttaggtctgc tgataaatct 3420 agtggagtat agtgctcgga atcggcactg tcttgtcaac atggaaacat cgtgctcttt 3480

```
tgattcttcc atctgtagtg gagaagggga tgatagttta aggataggtg gacaagttca
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aagtaaaaca gatgagttga tcaaagatgc tcccaccact cagcatgata agagtggaga
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                                                                     3720
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ctttattctg ggcaagtttg aaggggaaaa tttgtgctgc tgttagtgca actgctgtgt
                                                                     4380
atgttgagcc actgttgtca tgccagccag gtgcaaaggc agcttagcta ctgaggtagc
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gaatgttctg aggacattct agacaacagc ttagttcctt tttcaggctc atttgctttt
                                                                     4500
gcttttttgt tgaatgattc caatcgtaaa taaagctttt aataattttg tgaatttttt
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gattttgagg aaagactctc tagatatatt ttctaatgtt cagtacaata aatataagga
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agctaaaaca ccaatgtgga attcctgttt ccagataaca tgtatattct tctatagagt
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gacaggatca attgcataag cgcaaagcct taaattgctg gtttagagaa gacccttttt
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ttttatagat ttaatatcat aacattgcaa atttttcttg tattattgtt cacaccactg
                                                                     5160
gttatacttt ttttttcct tttttattga tggggcctga atacaggctt tctagagatc
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tttttcatta atacttttaa atacctttca ggtagttaca tcatgtttct tcattggatt
                                                                     5280
tgtaaaactt gaagccataa aaatattagt ttggtgtgta ttggggaaaa tagctaaaag
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cttaactaaa agttttaaag taaccttttt tccattgtaa atatttctgt aaatactacc
                                                                     6120
aattggaaat tagaacagta gagtactttt ctgaatccaa tcctattttt attttataca
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                                                                     6240
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ctttcaatac aaa
                                                                     6313
```

<sup>&</sup>lt;210> 5760

<sup>&</sup>lt;211> 3206

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (2300)...(924)
<223> similar to gi5419890 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

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                                                                      120
tttacagtag agatctgcat ctgacccctc tatcccatac ctttgcaaag gaagggaggg
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gtctacaagc cagaactttc agaagagaag aaaatacatg ctgtgctggt gctgtttctg
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gagcaggtca tcctttaggt atagaacacc acctccaccc gatgacatca gaaccactga
                                                                      300
ctggtagagc ccttggaaat catacagtcc acccatcccc cgccagacac atggacacac
                                                                      360
cgaggctcag atggggaagg gtacataccc tagggcacac accaaatcaa aaaggtgaag
                                                                      420
tcaggactag aacacctgag caactttagc aggggactgt ggccacaggc ctggatgtgc
                                                                      480
acagtagatc atgaaataca ttagtcctag tgaatgaccc ccgtgcagag aaatggcttg
                                                                      540
tggttgtcag ggagcagcca cttgcctcag gggctccctg accctcagtg aaaqgtgact
                                                                      600
gtgtaaaggc caaaaactgg atggtggtca tgaacctcag gacgtttttt ttttttagca
                                                                      660
ccaaatggtg gagetetetg ccageteage ttettgggge eteteaggta aaggtgatgt
                                                                      720
ttgaggaccc cacgcccata tgaggggtgg agagaagcca gcagcactgg ggtgagcctt
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                                                                      960
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gtagacagcc agcgccgaga agaaggagat gaagttgatg atgaagagcc gctgtttcca
                                                                     1140
gctgtaggac ttgcgatcct agggaatggg ctgtctgatc actctgcagc ttgctgggta
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tgagagcgtg ggctcccctc tcagccctaa ctcctaaggg ctgggcctta tctcccttgg
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ctcccactag cggtcatgga agggagcaca ggcaggggca gcaagaatga cgactatgtg
                                                                     1320
ttcacgtccc tgcctctggg ggagtgatgg gccgaggagc agtggtattc ctgccgcttc
                                                                     1380
cacttcaggg ggatggagta tgaaagttac atggagtcac ccaccaaccc cacctccaaa
                                                                     1440
tactgtgggg gaaaagaaac ccatgtacat gggtggggcg ctggaattat gacagaccag
                                                                     1500
tectetgaca etgtteetaa eteaetgeeg eetagatgeg aeteeteatt etateeeeat
                                                                     1560
ttgcagcctc catctcttct attctccagt ctcccacact acccaaacac agtgctatag
                                                                     1620
tectagatte tgaccaacca eceteagttt gtteceaage eceageeca aceceageae
                                                                     1680
ccctctgcca gggttcccat tagaactcag ttcccacctc accattaccc gaatcctgag
                                                                     1740
gacagatgtc cttgattttc ttctgggctg ccttggagcc cccgctaggg atagaccgta
                                                                     1800
cctcctgact tactgtgtgc ttcttggtca accgccagag aatgcaggtg aggagcatgt
                                                                     1860
gcccgaggga tgaggcaatg aacacaatga aagcattttc gtggatggct ggagggaaag
                                                                     1920
aggattggga gccacattgc agggagtgcc cacaccacga agtaggaagg tccgaatgtg
                                                                     1980
gtaggggcag gcccgtcccc tcagggaaca cttccccact cctcctcat ccaggcaccc
                                                                     2040
actgaagtcc tcggaggagg agacataagt gagcactagc aacgcgaggt tctccacgac
                                                                     2100
attgaggccg aagttgaggc ggcagagcgg gcgatagcag gaacacgggg aggtgcagct
                                                                     2160
gaggtagtgg ttccagtagg cgaaggccac caagaagcga ggcgccgagt gcaggccgat
                                                                     2220
gcagaaacgc cacacgtagc gctggggcac ctccccgccg atggctgagc tcaccgaggg
                                                                     2280
caggtaattg ggcacctaga gagttgtgac ctgtctgggc atctgcctct gccagccccg
                                                                     2340
cccatgtgga gaacettete tecatetgae aaaateaete ttgeetetge tecageeeet
                                                                     2400
ccccttccaa gaagtcctcc ttcagatgtc cccatacctc tcccaaaaga cctctccttc
                                                                     2460
caggicctag gcccaaagig ciggatictc attccccagc tatcciggga titgigcagc
                                                                     2520
agcatggtgg caccttctcc atctcccccg cagactggaa cctgcctgtg tttggtcaat
                                                                     2580
gtgtagatgg gttcagatgc tcttcaccca tagctcagag ctgtgcctcc actaagaccc
                                                                     2640
tgggtgagtt ccaaggcctc agattcagtc cagaggacag ggatgagtca cagaccatct.
                                                                    2700
gagetteett agaacagtge tggatteact geteagetaa gatgtteete agtetgetee
                                                                    2760
```

```
cagegeeact cacteeteta ggeaggtgtg ceaaggtggt agaatggeac eeetgetetg
                                                                     2820
atcatgatta acaaagtggg tgggctgggc acgatggctc acatctgtaa tcccaqcaag
                                                                     2880
aatatggatt tttaaaagtt tccaaaactg tggaaatggc cagtccattg cccacacttt
                                                                     2940
ctgtgcactt ctgcagacct ccaacgaggg ccagcgcagt gccagagccc agcaacccag
                                                                     3000
caagggaatg aatttgctct aactatggag ggacagtctt cggaagtgga gttcttaagg
                                                                     3060
accatcattc ctttctttca atgagatgcc agactgctga gaaggtgagc aatgctgcag
                                                                     3120
gcggctcata gggcagccca caggtaggcc tggqqcaaqa ctaqccatqq qqcttcacaq
                                                                     3180
cctccacaaa aaaggagatg gattcc
                                                                     3206
```

```
<210> 5761
<211> 4441
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (60)...(3466)
<223> similar to gi1502311 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5761 ttttttttt ttgccgccca ctcagacttt attcaaagac cacgggcgac cggagcgcga 60 tggcgggggc ggcgggactc acggcagaag tgagctggaa ggtcttggag cqaaqagctc 120 ggaccaagcg ctcagtttta aaattgctat agcttagcct gcgacgctta tgattagagc 180 caacaatttg aaatggcctg ctcacctgat gcagtcgtct ctccgtcttc cgctttctta 240 aggtctggct cagtttatga acctcttaaa agcattaatc ttccaagacc tgataatgaa 300 actctctggg ataagttgga ccattattac agaattgtca agtcaacatt gctgctgtat 360 caaagtccaa ctaccggtct ctttcccact aaaacatgcg gtggtgacca gaaggccaag 420 atccaggaca gcctatactg cgctgctggg gcctgggctt tggctcttgc atacaggcga 480 attgatgatg acaagggaag gacccatgag ctggagcact cagctataaa atgcatgaga 540 ggaattctct actgctatat gcgtcaggcc gataaggtcc agcagtttaa gcaggatcca 600 cgcccaacaa catgtcttca ctctgttttc aatgtgcata caggagatga gttgctttcc 660 tatgaggaat atggtcatct tcagataaat gcagtgtcac tttatctcct ttaccttgtg 720 gaaatgattt cctcaggact ccagattatc tacaacactg atgaggtctc ttttattcaa 780 aaccttgtat tttgtgtggg aaagagttta ccgtgtgccc tgactttggg tgtctgggga 840 aagagggaag gcaaatatta ttaatgggca gcacagagct acattcgagc tcggttggtt 900 taggcaaaag gcagctctag aagcaattta atggattcaa cctttttggc aaccagggct 960 gttcgtggtc agttatattt gtggatctcg atgctcacaa tcgcaacagg caaactttgt 1020 gctcgctgtt acccagagaa tcaagatcac ataatacaga tgctqccctq ctcccctqca 1080 teagttatee tgeatttgee etggatgatg aagttetttt tageeagaea ettgataaag 1140 tqqttagaaa attaaaagga aaatatggat ttaaacgttt cttqagagat gggtatagaa 1200 catcattgga agatcccaac agatgctact acaagccagc tgaaattaag ctatttgatg 1260 gcattgaatg tgaatttccc atattttcc tttatatgat gattgatgga gtttttagag 1320 gcaatcctaa gcaagtacag gaatatcagg atcttttgac tccagtactt catcatacca 1380 cagaaggata tcctgttgta ccaaagtact attatgtgcc agctgacttt gtagaatatg 1440 aaaaaaataa ccctggtagt caaaaacgat ttcctagcaa ctgtggccgt gatggaaaac 1500 tgtttctttg gggacaagca ctttatatca tcgcaaaact cctggctgat gaacttatta 1560 gtcctaaaga cattgateet gtecageget atgteceaet aaaggateaa egtaaegtga 1620 gcatgaggtt ttccaatcag ggcccactgg aaaatgactt ggtagttcat gtggcactta 1680 tagcagaaag ccaaagactt caagtttttc tgaacacata tggtattcaa actcaaactc 1740

```
ctcaacaagt agaacccatt cagatatggc ctcagcagga gcttgtgaaa gcttatttgc
                                                                     1800
agctgggtat caatgaaaag ttaggactct ctggaaggcc agacaggccc attggctgcc
                                                                     1860
tcgggacatc aaagatttat cgcattctag gaaagactgt ggtttgttac ccgattattt
                                                                     1920
tcgacctaag tgatttctac atgtctcagg atgttttcct gctgatagat gacataaaga
                                                                     1980
atgcgctgca gttcattaaa caatattgga aaatgcatgg acgtccactt ttccttgttc
                                                                     2040
tcatccggga agacaatata agaggtagcc ggttcaaccc catattagat atgctggcag
                                                                     2100
cccttaaaaa aggaataatt ggaggagtca aagttcatgt ggatcgtcta cagacactaa
                                                                     2160
tatctggagc tgtggtagaa caacttgatt tcctacgaat cagtgacaca gaagagcttc
                                                                     2220
cagaatttaa gagttttgag gaactagaac ctcccaaaca ttcaaaagtc aaacggcaaa
                                                                     2280
gcagcacccc tagtgctcct gaactgggac agcagccgga tgtcaacatt agtgaatgga
                                                                     2340
aggacaaacc cacccacgaa attcttcaaa aactgaatga ttgcagttgt ctggctagcc
                                                                     2400
aagccatcct gctgggtata ctgctcaaaa gagaaggccc caacttcatc acaaaggaag
                                                                     2460
gtaccgtttc tgatcacatt gagagagtct atagaagagc tggcagccaa aaactttggt
                                                                     2520
cggttgtacg ccgtgcagca agtcttttaa gtaaagtagt ggacagcctg gccccatcca
                                                                     2580
ttactaatgt tttagtgcag ggcaaacagg taactctggg tgcctttggg catgaagaag
                                                                     2640
aagttatete taateetttg tetecaagag tgatteaaaa eateatetat tataagtgta
                                                                     2700
acacccatga tgagagggaa gcggtcattc agcaagaact ggtcatccat attggctgga
                                                                     2760
tcatctccaa taaccctgag ttattcagtg gcacgctgaa aatacgaatc gggtggatca
                                                                     2820
tccatgccat ggagtatgaa cttcagatcc gtggcggaga caagccagcc ttggacttgt
                                                                     2880
atcagctgtc acctagtgaa gttaaacagc ttctgctgga tattctgcag cctcaacaga
                                                                     2940
atggaagatg ttggctgaac aggcgtcaga tcgatgggtc tttgaataga actcccaccg
                                                                     3000
ggttctatga ccgagtgtgg cagattctgg agcgcacgcc caatgggatc attgttgctg
                                                                     3060
ggaagcattt gcctcagcaa ccaaccctgt cagatatgac catgtatgag atgaatttct
                                                                     3120
ctctccttgt tgaagacacg ttgggaaata ttgaccagcc acagtacaga cagatcgttg
                                                                     3180
tagagttact tatggttgta tccattgtac tggaaagaaa ccccgagcta gaatttcaag
                                                                     3240
acaaagtaga totagacaga ctggtcaaag aagcatttaa tgaatttcaa aaagatcaga
                                                                     3300
gtcggctaaa ggaaattgaa aaacaagatg acatgacttc cttttacaac actcctcccc
                                                                     3360
tgggaaaaag aggaacatgc agctatttga caaaggcggt gatgaatctg ctgctggaag
                                                                     3420
gagaagtcaa gccaaacaat gatgacccgt gtctgattag ctagtgggga aggtgtagga
                                                                     3480
agctctgttg agacacatgt tctgaagtgt gttgtgtttc atgttcaagc ttaatcaagg
                                                                     3540
cagccattaa tatacgaact gagcatgctg gggaggtgaa tgccacatcc ttggcggggt
                                                                     3600
tatggacctc ttgcatgtca tagccaatct aacggtaatg gtaaatgctt ttaatcaagc
                                                                     3660
aggaaaaagt totoatgatt atgocaacta taatagtaat cotoactgag tgataaaaat
                                                                     3720
agtttatgaa ttgaaaattt gccgctgcat gttgtatgat caaatagttc atcaaaatga
                                                                     3780
atctttgctc tttggactga attcttacca tactgccatt aaaataaatt tgccaactag
                                                                     3840
taatgcatac tggaaatcaa aagatactga aagaatggtg aacttctctt agtggtattg
                                                                     3900
tcatgctaaa agatgttaat atacatcata aaagcaaagt cagccagctg atattttggt
                                                                     3960
teteaaaaae tgeattatta ataatatttt agtataeaga getattetae agtttttaea
                                                                     4020
ttgtaaacat gactgtggtt ttgtatttgc taaatatagg ggttggacta aaatataata
                                                                     4080
aatctgtacc ttatcaaaca ttttctttga gctcctgcta aaaataggac atgtctatga
                                                                     4140
ttgttcaaaa atatgttaaa tttaggctca gcacagtagc tcacacctga aatcttagca
                                                                     4200
cttcgggagg ctgaggcagg tggatcactt gaggttagga gttcaagacc agcccagcca
                                                                     4260
acatggtgaa aaccctgtct ctactaaaaa tacaaaaatt agccaggcat gatggtgcat
                                                                     4320
gcctttaaac ccagctactg aggaggctga ggcatgagaa ttgcttgaac caggagacgg
                                                                     4380
aggttgcagt gagctgaaat cctgccactg cacaccagcc tgggtgacag agcgagactc
                                                                     4440
                                                                     4441
```

```
<210> 5762
```

<220>

<sup>&</sup>lt;211> 1105

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<221> misc feature
     <222> (1)...(1106)
     \langle 223 \rangle n = a,t,c or g
     <220>
     <221> misc feature
     <222> (185)...(666)
     <223> similar to gi30168 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5762
cctgggaatt cttagaaatt tctgaaataa taagttatcc ttttaaaaaa aaaaactttt
                                                                        60
attttaggtt cagggataca tgtataggtt tgttataaag ataaactcgt gttattctga
                                                                       120
aaagacttcc atttgcagac atcgctgctg cccagaactc cctgccaccc agccatggcc
                                                                       180
aacccccact gtgttcttca acattgcaat tgatagtgag tccttgggct gcatcttcct
                                                                       240
tcaagctatt tgcagacaaa gttctaaaag atggaagaaa aattttgtgc ttctgaacac
                                                                       300
tggagagaaa gtattgggtg ataaaggtcc ctgcttttac agaattattc cggggtgtgt
                                                                       360
gtcagggtgg tgacttcaca caccataatg gcactggtgg caagtccctc tacagcaagg
                                                                       420
aatttgatga tgagaacttc atcctaagca tacagctcct ggcgtcttgt ccacggcaaa
                                                                       480
tgctggaccc accacaatg gttcccagtt tttcatctgt actgccaaga cagaggatgg
                                                                       540
atgacagcat gtggtctttg gcaaggtgaa agatggcatg agtattgtgg aagccctgga
                                                                       600
acgctctggg tccaggaatg gtaagaccag caagaagatc acagctgcta actgtggaca
                                                                       660
actctaataa atttgattgt tttatctgaa ccaccagatc gttccttcta tagctcagga
                                                                       720
aagcatgctt ccaccccatt tgctcacagc atcctataat ctttgcacag tcctttgggt
                                                                       780
tccatatttt ccttatcctc ttccatgtct agctggatcg cagagttaag tttataatta
                                                                       840
caaaatgaaa actaagtaac aagaagaaaa taaaagactt ccagcaattt ttatactctt
                                                                       900
tagtcattac tgtggatatc taaaagaaat tggtttaata aataagaaat attacattta
                                                                       960
gcaaatttat aaacaactat agcctgagat tnngggngnt caaactttag aaaataccag
                                                                      1020
tgaacatttt tgggtaatat tcaaagaatg tgacattcag atctcntqqn ttccncqacq
                                                                      1080
gttactcagg tctctaangg gacct
                                                                      1105
     <210> 5763
     <211> 1731
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1710)...(814)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5763
atattgatct cctggagatt cgaaatggac caagatccca tgaatcattc caagaaatgg
                                                                       60
atcttaatga tgactggaaa ctctctaaag atgaggttaa agcatattta aagaaggagt
                                                                      120
ttgaaaaaca tggtgcggtg gtgaatgaaa gtcatcatga tgctttggtg gaggatattt
                                                                      180
ttgataaaga agatgaagac aaagatgggt ttatatctgc cagagaattt acatataaac
                                                                      240
```

```
acgatgagtt atagagatac atctaccctt ttaatatagc actcatcttt caagagaggg
                                                                      300
cagtcatctt taaagaacat tttattttta tacaatgttc tttcttgctt tgtttttat
                                                                      360
ttttatatat tttttctgac tcctatttaa agaacccctt aggtttctaa gtacccattt
                                                                      420
ctttctgata agttattggg aagaaaaagc taattggtct ttgaatagaa gacttctgga
                                                                      480
caatttttca ctttcacaga tatgaagctt tgttttactt tctcacttat aaatttaaaa
                                                                      540
tgttgcaact gggaatatac cacgacatga gaccaggtta tagcacaaat tagcacccta
                                                                      600
tatttctgct tccctctatt ttctccaagt tagaggtcaa catttgaaaa gccttttgca
                                                                      660
atagcccaag gcttgctatt ttcatgttat aatgaaatag tttatgtgta actggctctg
                                                                      720
agtctctgct tgaggaccag aggaaaatgg ttgttggacc tgacttgtta atggctactg
                                                                      780
ctttactaag gagatgtgca atgctgaagt tagaaacaag gttaatagcc aggcatggtg
                                                                      840
gctcatgcct gtaatcccag cactttggga ggctgaggcg ggcggatcac ctgaggttgg
                                                                      900
gagttcgaga ccagcctgac caacacggag aaaccctatc tctactaaaa atacaaaagt
                                                                      960
agccgggcgt ggtgatgcgt gcctgtaatc ccagctaccc aggaaggctg aggcggcaga
                                                                     1020
atcacttgaa cccggaggcg gaggttgcgg taagccgaga tcacctccag cctggacact
                                                                     1080
ctgtctcgaa aaaaagaaaa gaaacacggt taataacata taaatatgta tgcattgaga
                                                                     1140
catgctacct aggacttaag ctgatgaagc ttggctccta gtgattggtg gcctattatg
                                                                     1200
ataaatagac caaatcattt atgtgtgagt ttctttgtaa taaaatgtat caatatgtta
                                                                     1260
tagatgaggt agaaagttat atttatattc aatatttact tcttaaggct agcggaatat
                                                                     1320
ccttcctggt tctttaatgg gtagtctata gtatattata ctacaataac attgtatcat
                                                                     1380
aagataaagt agtaaaccag tctacatttt cccatttctg tctcatcaaa aactgaagtt
                                                                    1440
agctgggtgt ggtggctcat gcctgtaatc ccagcacttt gggggccaag gagggtggat
                                                                    1500
cacttgagat caggagttca agaccagcct ggccaacatg gtgaaacctt gtctctacta
                                                                    1560
aaaatacaaa aattagccag gcgtggtggt gcacacctgt agtcccagct actcgggagg
                                                                    1620
ctgagacagg agatttgctt gaacccggga ggcggaggtt gcagtgagcc aagattgtgc
                                                                    1680
cactgcactc cagcctgggt gacagagcaa gactccatct caaaaaaaaa a
                                                                    1731
    <210> 5764
```

```
<211> 1482
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1421)...(943)
<223> similar to gi1246757 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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<400> 5764
actacagcag tacataaagt tttattaata ttctgattct cgtgtcatag cttttatggc
                                                                       60
aggaaaggat gaggacatgc cccacctgta acgtagagca agcaaaccac caagtagaat
                                                                      120
cttgagattc tctctcaact gttctctaga aacacqcttg tgcttttaat ctgcctttta
                                                                      180
aaagggacac agaacaaaaa atggttgttt gcaaataaac atctgaaaga aagtaacagc
                                                                      240
tgacctgggc tgaggcatcc aaacaaagca gtcattgtgg aaggagacaa tgcaaaccac
                                                                      300
actggggcaa gaaacggggc agagaacgtg cggtcatttg tgcgttgggt atttctacca
                                                                      360
gccccaaagg ccccatctgg aacaagtatc aaccaggagg ggctctatgg cttgatttat
                                                                      420
taacctaact caaaagaagt cactgccacc aacagcactg tgcagtttta ttaaccattc
                                                                      480
aagtccagta gcatctggta agattgggac agaattggga ttgaaaagtg aacagatatt
                                                                      540
cagcatctaa cagttcaaaa gaagccacta catactcttt tcacaaatat gttttcacag
                                                                      600
agccaataca gtactagcca ttaacccagt acaccaagtg tactgaagta gaaaagatgc
                                                                      660
aacaagaaaa atagctacat tagaaagacc aacactttag aaaaagagta aaacactttc
                                                                      720
```

```
agtttettee eettttagee eeectaaaaa caaacatttt tacagteetg gateetggga
                                                                      780
tcttaccttt tacagtccta cattaggctt tcttaaaata tttgtccagg agggggaaaa
                                                                      840
aataaaattg gccactgggc caggtaccag tctttgggat atttaggaag gggggatggg
                                                                      900
gaagaaagtc aagttcctca gaaacaaatt agtcaggctt caggtctcgt cgcggacagg
                                                                      960
gtctttggga ttccttggtt cttccqqaac ttcttcaatq tqcttaaccc ttcctcctcq
                                                                     1020
caaaagttcc caatttggca acceatttgt gccctctcqg gttcctcctt taattagctt
                                                                     1080
ccqattttgt gggtgragtt ttctcttctg cccattttta ctgaagttgt ttgttctctt
                                                                     1140
ctaattgcct ttctgcaagc acttctttct tcggtgcctc tcggtttctc agccaqctgc
                                                                     1200
cttcaagacc tcaagcttca tggggacttg cgtctttctt ctggcagctt cctaattctc
                                                                     1260
tcggaatttc cccccgggga agaacccttc ttctttgggg ggggagaggg ggaattctqq
                                                                     1320
aacaaattcc tttgcccgag gggctgagaa tcaggctcaa aagcctggcc tgaggcacqc
                                                                     1380
ttctccagtt ctttcacctg gatatcagaa gaagccatgg tgaatagaag acaagcgaca
                                                                     1440
gggcagtgta ttctgcacaa tcaactggga taaggaaagt cc
                                                                     1482
```

```
<210> 5765
<211> 5716
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (218)...(4657)
<223> similar to gi406225 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5765 tgcgaccgcc accccttcc ccgctgccag cactcaccct ctctccgctc ctqctcgcaa 60 cctcgcggtt cctggggtgc ttgtgcccac tgtgtggaca gcgcqqqcqq acttttqqqc 120 eggggegtgg egtgeggggg aggeteteta aggeeteege etetgeetet eeegeeeeet 180 taccegeece ggagaegaea gegteggagg etecgeeatg geetegggag eeggaggagt 240 cggagggggc ggtggcggca agatccggac gcggcgttgc caccaggggc caattaaqcc 300 ttaccagcag gggcgacaac agcatcaggg cattcttagc agggttacag aatctgttaa 360 gaatattgtg ccagggtggc tacaaaqata cttcaacaaq aatqaaqatq tatqcaqctq 420 ttcaacagac acaagcgagg ttccacqctq qccaqaaaat aaaqaqqacc atctqqtata 480 tgccgatgag gagagctcta atattactga tgggagaatc acacctgagc cagcagtcag 540 taatacagaa gaaccttcaa caactagtac tgcttcaacc ttatccagat gtgttaacaa 600 gggtttctct ttatcggagc catctgaatt tttccatgtt ggaatcccct gcattacact 660 gtcagccatc tacatcctcg gcattcccaa ttggcagttc gggattttcc cttgtaaagg 720 aaattaaaga ttctacctct cagcatgatg atgataacat ctcaactacc agtggttttt 780 cttcaagagc ttctgataaa gatataactg tttcaaagaa cacttcattg ccacctctgt 840 ggtccccaga agctgaacgt tctcactcac tctcacagca cactgccacc agctcaaaaa 900 aaccagcatt caacttgtct gcctttggaa cactttcccc ttcacttggg aattcttcaa 960 tccttaaaac cagtcagctt ggagattctc ctttttatcc tggaaaaaca acatacqqtq 1020 gggcagcagc tgctgtaaga cagtctaaac tacgaaatac accttatcag qcaccagtta 1080 gaagacaaat gaaagctaag caactcagtg cacaatctta cggtgtgacc agttcaacag 1140 ctcggcgaat attgcagtct ttagagaaga tgtcaagccc tttagcggat qcaaaaagaa 1200 ttccatccat tgtttcttct cctctgaatt ctcctcttga taggagtggg atagatatca 1260 cagattttca ggccaaaaga gaaaaggtgg attctcaata tcctcctgtt cagagactta 1320 tgaccccaaa gccagtttcc atagcaacaa atcgaagtgt ttattttaaa ccatctctga 1380 ctccttctgg tgaattcagg aagactaatc aaagaataga taaqaagtgc agtactggat 1440

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caattataag tagttcagct catcatgtca ctacagtgaa cagtacaaat tgtaagaaga
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caccacctga agattgtgag ggtcctttta gacctgcaga aatcctgaaa gaaggaagtg
                                                                     2040
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                                                                     2100
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```

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<210> 5766
<211> 2351
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (10)...(1498)
<223> similar to gi456257 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
<400> 5766

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```

ccggggcgga tggctccggc cgcctggctc cgcagcgcgg ccgcgcgcgc cctcctgccc 60 ccgatgctgc tgctgctgct ccagccgccg ccgctgctgg cccgggctct gccgccggac 120 gtccaccacc tccatgccga gaggaggggg ccacagccct ggcatgcagc cctgcccagt 180 ageceggeae etgeceetge caegeaggaa geceeegge etgecageag ceteaggeet 240 ccccgctgtg gcgtgcccga cccatctgat gggctgagtg cccgcaaccg acagaagagg 300 ttcgtgcttt ctggcgggcg ctgggagaag acggacctca cctacaggat ccttcggttc 360 ccatggcagt tggtgcagga gcaggtgcgg cagacgatgg cagaggccct aaaggtatgg 420 agcgatgtga cgccactcac ctttactgag gtgcacgagg gccgtgctga catcatgatc 480 gacttcgcca ggtactggca tggggacgac ctgccgtttg atgggcctgg gggcatcctg 540 gcccatgcct tettececaa gaeteacega gaaggggatg tecaettega etatgatgag 600 acctggacta tcggggatga ccagggcaca gacctgctgc aggtggcagc ccatgaattt 660 ggccacgtgc tggggctgca gcacacaaca gcagccaagg ccctgatgtc cgccttctac 720 acctttcgct acccactgag tctcagccca gatgactgca ggggcgttca acacctatat 780 ggccagccct ggcccactgt cacctccagg accccagccc tgggccccca ggctgggata 840 gacaccaatg agattgcacc gctggagcca gacgccccgc cagatgcctg tgaggcctcc 900 tttgacgcgg tctccaccat ccgaggcgag ctctttttct tcaaagcggg ctttgtgtgg 960 cgcctccgtg ggggccagct gcagcccggc tacccagcat tggcctctcg ccactggcag 1020 ggactgccca gccctgtgga cgctgccttc gaggatgccc agggccacat ttggttcttc 1080 caaggtgctc agtactgggt gtacgacggt gaaaagccag tcctggggcc ccgcacccc 1140 tcaccgaget gggeetgggt gaggttteee ggteeatggt tgeetttggt ettggggtte 1200 ccgagaaaga aacaagattc taacttcttc ccgaggcagg gtactactgg cgtttccacc 1260 ccagcacccg gcgtgtagac agtcctccgc tcccgcaggg ccactggact gggagagggg 1320

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                                                                     2280
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<210> 5767
<211> 2238
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2205)...(506)
<223> similar to gi5912186 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5767 tttttttttt ttgatgattt ggatattatt attacaaaga atttaaatat acaagtttgg 60 ctatgaaaga cccagctaag ccacttaggc aaaagtctat ctttgatgtc atagtttcca 120 agaagtatca taagagtcaa acagttaaac atttctctgt gctttttttt tctattttct 180 aggaaatgtt gggtttagag agaagctcat caacttactt atacaaatca ggatatactg 240 aggggggggg aggataaact cgacatttcc atattttata atataatgtg gaaagattca 300 gaaatgactg agaagataca gtgatatgat atttaaagca aatattggca tatgcttata 360 caagaaaggc atcttacaat aatatttctg ttggtacatt acaatttttc agctagtaat 420 tctaaaatgc cagaggtcct atgatgcaat atcaaaaaaa ccagggaact gacatacaaa 480 gtcaaatata aagatagtaa cattcagtca tccacagata aaaggctatc tggacataag 540 cctgaaacaa gcaagacgcc atccactgcg atttcgccgg ttttgccctt gccacgttct 600 gcttcaaaaa tgatgctttt ggtagcatca gttccttgat acaactgaat tttccctgtc 660 ttccactttt catcctcact cgtggtcttc tcccatgcca gggcattgtt actgtttttc 720 acaaacactc gaagtttccc gactttgtct ccggccagcc ggtaatcaaa gagcaaacag 780 aagttgcttt ggggttgcag gtcaggtagg agaagtttca atcggccaat gtctttcctt 840 gtgaccctgc caaaggccgg gaactgccaa tatagaagcc aaatagcatt atctccgatc 900 agcaggatte ceagteaaaa teatettegt etateetgtt teecagteae agateeceat 960 gattgaagct gcagtcaacc gagatattta aatctgcttt atgttccagt ttggaagtta 1020 gcgctttcct ttggaccgag aatcaggccg aattcacctg cttcattcac cttagggaaa 1080 aacacatete eetegaaaag gtegeteeet eetatgteaa teetteaggg etttetette 1140

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<210> 5768
<211> 2123
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2023)...(1259)
<223> similar to gi930259 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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tgctagggcc cttagacctg ggggccagcc tttggaaatc ctgtctagtt gttttgagag
                                                                     1260
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ccacacatct gctcggggat gaacaagggc tgactgattg ataagctctt gaaaattctt
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aagctaactg catcetttea ggtetecaag gaatgetaag ttteeteect gttgtgagag
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tagaatccca gagaagggct accatgcagc ctacgcctgg ttgactggag aaccacgtta
                                                                    2040
gtggaaaggg gacaatctgg gcctctggcc tgccatgtgt acacacataa caattgcttt
                                                                    2100
tgtttaatgt gcagatggaa tat
                                                                    2123
```

```
<210> 5769
<211> 798
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (141)...(722)
<223> similar to gi3150438 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5769 ccagtgaaga aacgccagag tgtggaaagt ggaggacgac tgatgaagga tgcctgagta 60 cgtttttact tcaggctcta tgggagagaa tcagcttcct gtctgggtac ccacaaqaca 120 tcttaagctg tgccatgagc cagaatccaa ggaagaggaa aagacctcgg aatgtccctg 180 cacccctggt tcatcagatg gctcagatga acatctctgt tgagcagatg gaaaccagta 240 aaacttgcca agcaactcca ccgacctgtg ggcagatgaa gagactagct cacattgcag 300 acgagaacct gaggtctcag aacaagctgc tgaccaccag taatctaatg atagctatga 360 tggcagtaat ctccttggcg gtgagtctcc ccgtagctgg ggcagatcaa aattacattt 420 attgggccta cattccattc ccccactgat taggtctgtt acatggttag accccctggt 480 ggaggtttat attaatgata gtgtctggat gcctggacca acaqataact qaqqtcctac 540 tcatccagag gaggaaggaa tgttaatgaa tgtttccatt ggttatcgct ttcctcccat 600 ctgcctgggg ccagcagcag gatttttaaa ttatgataaa caaatttgga tggtttatgt 660 ccctgcacat aatggatcaa aagcctctat tcatgcaatc agtggaagaa catttcaatc 720 tttggacact attaaatacc ttgagcatgg ctatgttatg acacatcgcc agattaataa 780 atttaaacct aataagaa 798

4310

```
<210> 5770
<211> 1624
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (528)...(1488)
<223> similar to gi1685379 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5770 taaaagacag tgatctcacg cggaggggaa gatgtttgcc atcaaaatgt gacagaagag 60 acacgctgca tggctcggaa cgcatctcct tggtggtggg ggaaagagac ttagaggaga 120 gaggetgege cetggeecag cetggetegg etcageteeg egegeeatgg caagetegge 180 ttccctggag accatggtgc ccccggcctg cccqcqcqcc qqaqcqtcqc cqqccacttc 240 caagacactg gccttttcca tcgagcgcat catggccaag acqtcqqaqc cccqtqcqcc 300 ctttgagccc cggcctggag cgctagaggc qgacgqcaqc caqqqcaaqa aactgctcaa 360 cetetgeteg cegetgeeet gtatgatece cetecagece etaggetacg aggtgeegte 420 aaagacactg ctcagttact cggagctctg gaaaagcagc ctccgggcgg gcggcggcgg 480 aggcggcggc ggcggtggcg gcggcggcgg cgggggggcc ccagtgtgcg gcgccagcgg 540 cttgtgcaaa accaactgtg gcgtgtgctg caaggccgag ctgggcctgg cgccgtccgc 600 getgeeegeg ggeagggtea teaageegea ggteateaac eaggetgtgg ggetgeegge 660 cagcggctcg ctctactact tcaactacct ggactcgacc gcgtacccgc cqtctqagct 720 cctcagcggc cacctcttcc cgtctggcct cctcaatgcg caggcccccg ccgccctggc 780 tgctcacccc aagctctttc tgctggagaa cgccaagctg gccggcctgg ctgcggacaa 840 gttcccccac ccggctccct atccccataa ggagcgcttg ccggcgccgc tggagcaggt 900 actgaaggaa aactcggccc tgactgccga gcgcggaggc gtcaagggcc acagcaagct 960 gccaggaggc tccgcagatg gcaagcccaa aaacttcacc tgcgaggtgt gcgqcaaqqt 1020 gtttaacgct cactataatc tcacccgcca catgccggtc cacaccggag ccagaccgtt 1080 cqtqtgcaaa qtctqcggca aaggctttcg ccaggccagc acgctctgca ggcacaaaat 1140 tatccacacc caggaaaagc cacataaatg caaccagtgc ggcaaaqcgt tcaaccqcag 1200 ctccacgctc aacacgcata tccgcatcca cgcgggctac aagcccttcg tctgcgaatt 1260 ttgcggcaaa ggctttcacc aaaaagggaa ctacaagaac cacaagctga cccacagcgg 1320 cgagaagcag tacaaatgta ccatctgcaa caaggccttc caccaggtct acaacctaac 1380 cttccatatg cacacccaca acgacaagaa gcctttcacg tgcgccactt gcggcaaagg 1440 gttttgcaga aactttgact taaagaaaca tgtgcgcaaa ctccacgaca gcgtgggccc 1500 tgctgcccc tccgcaaagg acctgactag gacagtgcag agctgaagag ctactgcctt 1560 gcccttcctt ccctcctgt accacctgaa aacagatcac acatataaac ttattctaa 1620 aatt 1624

```
<210> 5771
<211> 2641
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (2517)...(411)
<223> similar to gi29472 in the genepept database release 114,
```

## Run with FASTXY 3.3t00, default parameters

```
<400> 5771
ttttttttt ttaagagaga ggcaatttta ttcttccaaa aaaatgcacc aagagagggt
                                                                       60
gagcacagga gcacccctgg ccacatcccc catcctaagc agggtctgag atgaggccag
                                                                      120
gcctgacgtg ggcttgggag aagctgacgg agctccctgt ggccttgggg agggaaccag
                                                                      180
qcagacctgg aagtggaact ttgttgttag caccaggagc cgcccacagc tgggctcggc
                                                                      240
aacagggcag cacatggccc tgttgcctcc acctgagagt ctggggaggg gctggtggca
                                                                      300
gaaggeteee tgeaggaggt cacetgaatg acteteagat teacagaeee eetetgeeee
                                                                      360
cacaacccct gtaaacatga gaatgggctc gtgacaccct caacacctca ggacaagatg
                                                                      420
agggtccgag atgtgtggct gggcttcagg cggcccagga gctgccgggc tttctcctqc
                                                                      480
atgaaaagct ggtccctggt cccccgcag gccaccgtct tccaggcact ggacataggg
                                                                      540
gcaggtgtcg tgaagtggct tcggggcttc tgggccactg ctgccttctc gggcttggcc
                                                                      600
tgcaagaagc cctggttgag caagctgttg tcttctttga tacctgacag ggtgaggctg
                                                                      660
gaagagtttg aaggggcagt tgtcggcaag gatagagact tgggcagtgt ggacatcatc
                                                                      720
agcttcatat cctcatccac aatgtcaaga gccagagact tccggacttt cttgatgggg
                                                                      780
ctccgccgca gcccaggctt cctcttctgc ttctcgggcc tgatgtcgtc ctcgatgatg
                                                                      840
agttcgatgc cagcctcaga acgcagcacc tccttcaagt cctcctccag gtgcggggtc
                                                                      900
tgtggcaggg gcttcagggg tccgtacttc tccagggcgt tcttgaacgg ggttggcgtg
                                                                      960
tggggagtgt tgtccatgga gtacttctga tctggggtta caaacgcagc atgtttctgg
                                                                     1020
tgcaggggtg tcttgtcccg gtgcagtggt gtggtgacca ccaccttctg gctgcacact
                                                                     1080
ggggtggatg tcagcgaggg gctctccagc tccaatgtgt cctgtttgtt ccagaagttc
                                                                     1140
agaaactggg agggcgagaa gggcagggtc ttaacaggtg tgctcttggg cgtgaggctg
                                                                     1200
ttacaggaat ccaggaagga cagactggtg ctattctcag tgacagggga cagagccaca
                                                                     1260
cgcctcttcc tctgccgctt gagcacagag ggcggtgtgc caatgccaga gcccccgact
                                                                     1320
tcagtgctgg gggagatggg gatcagctcg ccccggctgc tccggctcag gtctgagatg
                                                                     1380
gtgtggccat ccaggcggta ctcggtcaca ctgggcacca cgggcggaag gctggcgggg
                                                                     1440
tggcaggact tgctgctgat gtgacgcttg cagctgcact aggctgttgt tgatactgtc
                                                                     1500
ctctgcagat ggttcctcag ggaggtcaaa tttactcagg tcacaccaag catcagggtc
                                                                     1560
cqactcqatc aagtccaggg cttcagagag gctagaaccc acagcgggga tgaggaggtt
                                                                     1620
agctgcctcc accacccact tgtaaggcag gctcgtttct ggtggggagc cttcctqqtc
                                                                     1680
ctcacgettc gggaatteet ccaagggetc tggtgttege actgegteea gatetgtace
                                                                     1740
gatgggctcc tgttccttcg atgtggtggc tgctgcaagt tcctcctcac tgttttcctc
                                                                     1800
ctcctttatg gtaggaggga cggagggcca gttggtcaga agacttccct ggccttccgt
                                                                     1860
gggctgggca ctctggaggc cgtccttgtc ctcgagctcc agcagcaagt acactggggg
                                                                     1920
cttgcagtct ttggactcgc tcaagaagcc tcctgtgtcc accttccttt tgatggtaga
                                                                     1980
gttccagtga ttcttcacag cattgtctgt cctccctggc aacatcttgg cgatctcggc
                                                                     2040
ccagcggttg cccagcacct tgtgggcctc gcagatgatg cggtcctcct cctcggtcca
                                                                     2100
gcaagacttc ttcacctcag ggttgaggtg gttgtgccag cgttcacggc actgcttccc
                                                                     2160
cagccggccc ttcaggtgct tggcaatcag tgtccactgc tttgtgccat acttcttaac
                                                                     2220
cagctcgatg actttttggt cttcctcttt ggtccatggc cccttgacaa ggtctggatt
                                                                     2280
caaaactctc agccacctgt actggcattg ctggtcagtg cggttaggga agtggctggc
                                                                     2340
caggaacttc cagtcctgct gtccaaactg cctcaccagg gccctcagct gctcgtcctc
                                                                     2400
ctcatgggtc catttgacct tgcacttgct atccctctgc tccggcacat ctgaatctgt
                                                                     2460
gtcctggtag tgcagctcat ccatgattca ctcagcgcgc gtccgccgag acaatccccc
                                                                     2520
ggcccggacc gcgccgcgt cgcccgcccg ccggcagagc ccggagcggg agccgggccg
                                                                     2580
gggtcaggac ccgggctgct ccggccgctc cgggccccgg gccgcgctcg aaggcgtcag
                                                                     2640
                                                                     2641
```

```
<211> 1523
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1524)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1484)...(417)
<223> similar to gi3875351 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5772 cttttctaaa caaattttca cattgtaaac aaagcgtcct attttgtatt tgagttttgc 60 ctttttcttc ctagggaact ataagaggt ttctgtgacc attaagagga ctccattttc 120 accgctgaaa tagaattatt gcccttatag tcttgctggc aaattgttag aaaaaaagtt 180 tatttacagt attttgcttt tccataccaa ttctagtgag aagttcacat tcttaaattc 240 ccagtcagca actgcatttc tcccctccaa tgtcctctcc atgacttatc tctgaagttt 300 cgagccaatg tttaaaatgt acactattta caaatgaagt gtccaaatgc catattccca 360 gctctccagt cagcaggggg acccttctga agtgttgtca tgtgctggga ttcagaactt 420 gaacaagttg ataaagtcct ggggtgaaag tgaaacggag cagctctctg ggttattggc 480 agtgcacgga tggtcagtgc ccttccagga aaggatgtga cagtgtttgc agagctgaag 540 ggtatctcca tactgctctt tccttgggta acatcggaca agtttgaaat acatcttctt 600 ccaatccage tgccctttgt ctgacagaat taatcgtttg cggatctgcc gctcqqaqaa 660 gtggtactgg cagagtttct tccacagcag ccggtcttcg ctgagcacgt gcaggtcggg 720 ggcagcctgg cccaggctga ccaggtcccg cccgtcgctc agcctctgca tqatqttcaq 780 ttgtaggcac aaaggcaggt cagtgaaggt gaggcctttg aaggcaggcc tggtgatctg 840 aatgttgttc agctgctgct gccagtggag aatcgtctcc atccgataca cccacatgtt 900 aatgttcccg accagcacag acttgccgac tctttggacc agtgtacata aggatgtgta 960 gagggtctgg agtagttccc ttattagtct aatgttttgc tggtcttcaa ggactttcag 1020 taccactttt tccaaaatat tcatgaagtt cttttgggcg atgccactca gggatgtgag 1080 ctgtgacttt gctatcagct ccaacagccg gaccacgtag ttaaatcttc tggaatccag 1140 aatggcagtt gagaagtcca gtctgttgaa agcttccccc agggtgcaat atccatggcg 1200 ctctttagta cttcctttgt gaacatagat ccatttttct tggtggaaat actgagtttt 1260 ggttttgcta ttcagcatgt cettettet ettettgget geaacateat agttcagget 1320 gttgaaaaga ttctccttat tgtatacctc cttgttgcag taactgctga ggtcgctcac 1380 gaaactgccg ctcttctcat ccaggaagcg cttccagccg tcgaccgtct tcacccagtt 1440 ctgccccggg gaccgccagt cctgcccgag gaatggcatg gccccgcgag cgaattcaag 1500 cncnccaact aatggtctcg aat 1523

```
<210> 5773
<211> 6582
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(6583)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (527)...(3388)
<223> similar to gi2224671 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5773 tgcatgtccc cgcctcgcgc ggcggcggcg gcgggtgagg agcctgaggc ggcggcgggg 60 gtggctccgc gcgcggtggt ctcgggggca aaataacatg gcagccagac gaattacaca 120 ggagactttt gatgctgtat tacaagaaaa agccaaacga tatcacatgg atgccagtgg 180 tgaggctgta agcgaaactc ttcagtttaa agctcaagat ctcttaaggg cagtcccaag 240 atccagagca gagatgtatg atgacgtcca cagcgatggc agatactccc tcagtggatc 300 tgtagctcac tctagagatg ccggaagaga aagcctgaga agtgacgtat tttcaggqcc 360 ttccttcaga tcaagcaacc cttccatcag tgatgacagc tactttcgca aagaatgtgg 420 ccgggatctg gaattttctc actctaattc tcgggaccag gtcattggcc accggaaatt 480 ggggcatttc cgttctcagg actggaaatt tgcgctccgt ggttcttggg aacaagactt 540 tggccatcca gtttctcaag agtcctcttg gtcacaggag tatagttttg gtccctctgc 600 agttttgggg gactttggat cttccaggct gattgagaaa gagtgtttgg agaaggagaa 660 gtcgggatta tgacgtggac cattctgggg gaggcttgac tctgtgctta qqqqcaqcaa 720 gtcaagtcca ggccaagagg tcgagctcta aacatcgttg accaagaagg ttccctccta 780 ggaaaggggg agactcaggg cctgctcaca gctaaggggg gtgttgggaa acttgtcaca 840 ttgagaaatg tgagcacaaa aaaaataccc accgtgaatc gtattactcc caaaactcag 900 ggcactaacc aaatccagaa aaacactcca agtcctgatg tgaccctggg gacaaaccca 960 gggacagaag atatccagtt ccccattcag aagatccctc tqqqqctqqa tctqaaqaat 1020 cttcggctcc ccagaagaaa gatgagcttt gacatcatag ataagtctga tgtttttca 1080 agatttggga tagaaataat caaatgggca ggattccaca ccataaaaga tgatattaaa 1140 ttttcccaac ttttccagac tctctttgaa cttgaaacag aaacctgtgc taaaatgctt 1200 gcctcattca aatgttcctt aaaaccagag cacagagatt tttgcttttt tactatcaaa 1260 tttttaaagc actctgcttt gaaaacaccc agagttgata atgagttttt aaacatgctt 1320 ttagacaaag gtgctgtgaa gaccaaaaat tgcttttttg aaatcataaa gccttttgac 1380 aagtacataa tgagacttca agaccggctt ctgaagagtg tcacaccttt gcttatggcc 1440 tgcaatgcct acgagctaag tgtcaagatg aagaccctca gtaaccccct ggacttggct 1500 cttgccctag aaaccaccaa ctctctctgc cggaagtctt tggccctttt gggacagaca 1560 ttttccttgg cctcttcttt ccggcaggag aaaatcttat aagctgtcgg cctgcaagat 1620 atageteect cacetgetge gtttecaaae ttegaagaet ceaetttgtt tgggegagag 1680 tacatagacc acctgaaggc ctggctagtc agcagcggat gtcccctcca ggttaagaaa 1740 gccgaaccag agccgatgcg agaggaggag aaaatgattc ctcctacgaa acctgaaatt 1800 caggccaagg ctccaagtag tctgagtgat gctgtcccc agcgagcaga tcacagggta 1860 gtgggcacca tcgaccagct tgtgaaacgt gtcatcgaag gcagcctgtc tcccaaagag 1920 agaactcttc tcaaagagga ccctgcttac tggtttttgt ctgatgaaaa tagtctggag 1980 tataaatatt acaagctgaa gttggcagaa atgcagcgga tgagcgagaa cttgcgagga 2040 gccgaccaga agccgacctc agcagactgt gcagtgaggg ccatgctgta ctcccqqqct 2100 gtccgcaacc tcaagaagaa actccttccc gtggcagcgg cgggggctcc tccgtgctca 2160 aggggeteeg ggggetggaa ggegaggaga geegaeeaee gggaeeeaga eeeteetatt 2220 cctcagggca ccagggctga aacaccacgg ccggcaggct ccaggcctct cacatggcaa 2280 aaccatccct gccagacaga aatgattgct gccaaggact tgcccgctag acccaqtttg 2340 gacettetee teaggaceee agettagaag eeteaggeee ateeeceaag eeageaggag 2400 tggacatete tgaageacet cagacetett etecetgeee atetgetgae attgacatga 2460 aagacaatgg gagaactgca gagaaactgg ctagatttgt tgctcaggtg gggaccagag 2520 atcgaacaat ttcagcatag gaaaacagca ccgataaccc tgacctgtgg tttctacaat 2580 gaccaaaata gttctggctt tcaaattcta tccgaaagaa agtgtttgaa ctatgtccat 2640

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<210> 5774
<211> 2107
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1839)...(242)
<223> similar to gi188864 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5774 ttttttttt ttaaaccaca cttgtaaaaa agatgttgac aattcatagg aaaaaaagct 60 gaaaatgttt ctcattaagt cagggttaca caaaggttat atttataata tatatatttg 120 tatatttata atttagagac gaaaaatacg gaatggcaaa gtgatgcctg ctgtagttag 180 atctcaagat acctggatcg tttcccacaa acaagtgttt cttgacagaa ggggttaaca 240 agggaccatc ccagtgtctc tatagtcgcc attggctggg gagcggggct ctgagagctg 300 ggtcctcaga ggtttcaagg ggactgggat ctcccctggg gcagctccac aggcatgcct 360 gttggaaggt agtccctggg tgatgggtgt tgttcccgta ggcttcaggt tgttctccgg 420 gttggcggtc ttcttcttcc tcttcatgca gcacaccgtc agcaggacag agcaggagga 480 gatgggcacg ctgatggcca ggatcaccca ggcgatatcc atcttgctca ggcaqatggt 540 ggctctgtgc tgcggtttgt ccccctcggc cacatgggag atgttccctg ctgtcccagg 600 cttccaggtc ccggcgggga ccaggcggtt gaggaaattg cctgtggctg tggataccac 660 tgtggagaga ggactgggca cccggtcggt catggtgagg gtggccacag tctcctctt 720 ggctccagaa atagtgcttt ctgagaccct ggagggatgg gttggagctt gtggggttgt 780 ggatgctccc tgaggaatcc cctgggaagg ggctgagaca ctggtatcga aggcagctgg 840 ggtgggcccc gtggcagccg tgaagacccc agagctggta gacagaggtc tgctggtgcc 900 aggggtaaca gtaagccaag agtcactatg gctggggcca tcctgtgggt caccgtggtg 960 ggggcgctga gaaggcactg gggcagcttg tggactgaca ggggcacctg aggctgctqt 1020 ggcatctggt gtccctcctt ggctggtgaa ggtagaacca ccccctggg ctgctctqcq 1080 aaggcctggc ttgtcctttg caggccccag ggaggtggtg gtgggtgccc atgaggtatt 1140 gctgggcact gtggtcgcag ccactgtctg gggctgtggt gaagaggagt agccccagag 1200 tggggtcctg ggggtgaggg tagagggctc cggttccaca gaccctgtga agttgccctt 1260 gtagatetga aagattttee ceaggggeeg ettetgeece agaggtgtgg agettggatt 1320 tegteetege tgteettett taeteetgga gtggecacea ggtgeaggeg ggacagggeg 1380 tgatgaatta ccagcccctt ttcgggaaga gcctgggggc ctggggggcc tgcgtggt 1440 agtgcggggg ggcgctgtgg tggggcggct ggtggccccc ggtggctttg tcagcaggat 1500 ggtgggggca gcctgccctc gagggcggcc ctctggcttg gaggatgtgg ttgccatggc 1560 tgctggagcg ggccctgtgg acagggagct ttcagaatgg ggggcggtta ctgtcgcagc 1620 gatggtggag atggtgtgcg taggagggtg cccctctgca cggggtgtcq gtgttqccat 1680

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```

```
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    Run with FASTXY 3.3t00, default parameters
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1680

1740

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ccacgagage acceageggg getttggget gtetgecaca caggaegtge actteactga 5220 gaatctgctg cgggtgggca gcgccctcct ggacacagcc aacaagcggc actgggagct 5280 gatccagcag acagagggtg gcaccgcctg gctgctccag cactatgagg cctacgccag 5340 tgccctggcc cagaacatgc ggcacaccta cctaagcccc ttcaccatcg tcacgcccaa 5400 cattgtcatc tccgtagtgc gcttggacaa agggaacttt gctggggcca agctgccccg 5460 ctacgaggcc ctgcgtgggg agcagccccc ggaccttgag acaacagtca ttctgcctga 5520 gtctgtcttc agagagacgc cccccgtggt caggcccgca ggccccggag aggcccagga 5580 gccagaggag ctggcacggc gacagcgacg gcacccggag ctgagccagg gtgaggctgt 5640 ggccagcgtc atcatctacc gcaccctggc cgggctactg cctcataact atgaccctga 5700 caagcgcage ttgagagtee ecaaacgeee gateateaae acaeeegtgg tgageateag 5760 cgtccatgat gatgaggagc ttctgccccg ggccctggac aaacccgtca cggtgcagtt 5820 eegeetgetg gagacagagg ageggaeeaa geeeatetgt gtettetgga accatteaat 5880 cctggtcagt ggcacaggtg gctggtcggc cagaggctgt gaagtcgtct tccgcaatga 5940 gagccacgtc agctgccagt gcaaccacat gacgagcttc gctgtgctca tggacgtttc 6000 tcggcgggag aatggggaga tcctgccact gaagacactg acatacgtgg ctctaggtgt 6060 caccttggct gcccttctgc tcaccttctt cttcctcact ctcttgcgta tcctgcgctc 6120 caaccaacac ggcatccgac gtaacctgac agctgccctg ggcctggctc agctggtctt 6180 cctcctggga atcaaccagg ctgacctccc ttttgcctgc acagtcattg ccatcctgct 6240 gcacttcctg tacctctgca ccttttcctg ggctctgctg gaggccttgc acctgtaccg 6300 ggcactcact gaggtgcgcg atgtcaacac cggccccatg cgcttctact acatgctggg 6360 ctggggcgtg cctgccttca tcacagggct agccgtgggc ctggaccccg agggctacgg 6420 gaaccctgac ttctgctggc tctccatcta tgacacgctc atctggagtt ttgctggccc 6480 ggtggccttt gccgtctcga tgagtgtctt cctgtacatc ctggcggccc gggcctcctg 6540 tgctgcccag cggcagggct ttgagaagaa aggtcctgtc tcgggcctgc agccctcctt 6600 cgccgtcctc ctgctgctga gcgccacgtg gctgctggca ctgctctctg tcaacagcga 6660 caccetecte ttecactace tetttgetae etgeaattge atecagggee cetteatett 6720 cctctcctat gtggtgctta gcaaggaggt ccggaaagca ctcaagcttg cctgcagccg 6780 caagcccagc cctgaccctg ctctgaccac caagtccacc ctgacctcgt cctacaactg 6840 ccccagccc tacgcagatg ggcggctgta ccagccctaa cggagactcg gccggctctc 6900 tgcacagcac cagtcgctcg ggcaagagtc agcccagcta catccccttc ttgctgaggg 6960 aggagtccgc actgaaccct gggccaaggg ccccctgggc ttggggggat tccaggaagg 7020 cctgtttcct gggaaggttc aaagaccagc agcattgatt cctgaacaag ggatttcgac 7080 agtgacctgt ccttagaaga cgaccagagt ggctcctatg cctctaccca ctcatcagac 7140 agtgaggagg aagaagagga ggaggaagag gaggccgcct tccctggaga gcagggctgg 7200 gatagectge tggggeetgg ageagagaa etgeecetge acagtaetee caaggatggg 7260 ggcccagggc ctggcaaggc cccctggcca ggagactttg ggaccacagc aaaagagagt 7320 agtggcaacg gggcccctga ggagcggctg cgggagaatg gagatgccct gtctcgagag 7380 gggtccctag gcccccttcc aggctcttct gcccagcctc acaaaggcat ccttaagaag 7440 aagtgtctgc ccaccatcag cgagaagagc agcctcctgc ggctccccct ggagcaatgc 7500 acagggtett eeeggggete eteegetagt gagggeagee ggggeggeee eeetteeege 7560 ccaccgcccc ggcagagcct ccaggagcag ctgaacgggg tcatgcccat cgccatgagc 7620 atcaaggcag gcacggtgga tgaggactcg tcaggctccg aatttctctt ctttaacttc 7680 7740 ctcatgccct gctcctgtct tgtgctttat cctgcccgc tccccatcgc ctgcccgcag 7800 cagcgacgaa acgtccatct gaggagcctg ggccttgccg ggaggggtac tcaccccacc 7860 taaggccatc tagtgccaac tccccccca ccattcccct cactgcactt tggacccctg 7920 gggccaacat ctccaagaca aagtttttca gaaaagagga aaaaaagaat ttaaaaaagg 7980 atctccactc ttcatgactt cagggattca ttttttttat acgctggaaa ttgactcccc 8040 tttcccttcc caaagaggat aggacctccc aggatgcttc ccagcctctc ctcagtttcc 8100 catctgctgt gcctctggga ggagagggac tcctgggggg cctgccctc atacgccatc 8160 accaaaagga aaggacaaag ccacacgcag ccagggette acaccettea ggetgcacee 8220 gggcaggcct cagaacggtg aggggccagg gcaaagggtg tgtctcgtcc tgcccqcact 8280 gcctctccca ggaactggaa aagccctgtc cggtgagggg gcagaaggac tcagcgcccc 8340 tggaccccca aatgctgcat gaacacattt tcaggggagc ctgtgccccc aggcgggggt 8400 cgggcagccc cagcccctct ccttttcctg gactctggcc gtgcgcggca gcccaggtgt 8460 ttgctcagtt gctgacccaa aagtgcttca tttttcgtgc ccgccccgcg ccccgqqcag 8520 gccagtcatg tgttaagttg cgcttctttg ctgtgatgtg ggtgggggag gaagagtaaa 8580

```
cacagtgctg gctcggctgc cctgagggtg ctcaatcaag cacaggtttc aagtctgggt
                                                                     8640
totggtgtcc actcacccac cccaccccc aaaatcagac aaatgctact ttgtctaacc
                                                                     8700
tgctgtggcc tctgagacat gttctatttt taaccccttc ttggaattgg ctctcttctt
                                                                     8760
caaaggacca ggtcctgttc ctctttctcc ccgactccac cccagctccc tgtgaagaga
                                                                     8820
gagttaatat atttgtttta tttatttgct ttttgcgttg ggatgggttc gtgtccagtc
                                                                     8880
ccgggggtct gatatggcca tcacaggctg gqtqttccca qcaqccctqq cttqqqqqct
                                                                     8940
tgacgccctt ccccttgccc caggccatca tctccccacc tctcctccc tctcctcagt
                                                                     9000
tttgccgact gcttttcatc tgagtcacca tttactccaa gcatqtattc cagacttqtc
                                                                     9060
actgactttc cttctggagc aggtggctag aaaaagaggc tgtgggcagg aaagaaaggc
                                                                     9120
tcctgtttct catttgtgag gccagcctct ggcttttctg ccgtggattc tccccctgtc
                                                                     9180
ttctcccctc agcaattcct gcaaagggtt aaaaatttaa ctggttttta ctactgatga
                                                                     9240
cttgatttaa aaaaaataca aagatgctgg atgctaactt gatactaacc atcagattgt
                                                                     9300
acagtttggt tgttgctgta aatatggtag cgttttgttg ttgttgtttt ttcatgcccc
                                                                     9360
atactactga ataaactagt tctgtgcggg taaaaaaaaa a
                                                                     9401
```

```
<210> 5776
     <211> 2746
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (2598)...(606)
     <223> similar to gi5579331 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5776
tttttttttt ttagagcaaa tcaactttta tctccaccga aaagacccat tccactggag
                                                                       60
gggcccgtga gctagacgga cttgccgtcc agccctccaa gccccctqcq qqqcqqccaq
                                                                      120
gaggatecet gagtecaget tgtaaacace agagecagee etqqageete aggeetetgg
                                                                      180
agtcacggca gcccctccag acccttggat tggggacatc tgaggcttca cgagcccggg
                                                                      240
cagagetgea ecetgggetg tecaeteggt caeeceagta ecagggaeea ectegaagee
                                                                      300
cccctctggt cggcccacag agacctgctc aggcttcagc aatcgtgagt catgattcgt
                                                                      360
gtcttctgga ggaagcaggc ggaggctcca gcggcccagc ccaccccgca tcacaccaag
                                                                      420
actgacggcc tcacttgtcc tcacggtgtc ctgattaaag cagagacgag gaggagccca
                                                                      480
gagccagttc agagcctggg ccacttggcg gttgccggtg ctacqtqqqc ccttqqaaaa
                                                                      540
tgccacagac ccagcaaggt gcctctgccc acccgaagtc cccacaccag cagccatcca
                                                                      600
ccctaggcag gggtccagat aggcagaggg tgggcttcgg tgttgaacac gtaggcgtcc
                                                                      660
aggctgagca ggtttgggtc atcggagaag agcaagaaca gatacttgag cgtctcccc
                                                                      720
aggaagaage tetecatett gteeetagge tegggettet gaggateetg gacattgttg
                                                                      780
atggaagaat agccacccga ggggacccgt gtgaatcggc tgaagctctg cagaatctcc
                                                                      840
cagececagt cetggtattt geggteeect gtgacgeggt acaggtagaa caggetetee
                                                                      900
acggtctctg gccgcagcag gttgtgcctg tctgctggct tgacctccac gtcccgacgg
                                                                      960
cccggctggg ggtaaaggtt gaagtgcacg atctcgggac tcagccccgt ctccatctqc
                                                                     1020
eggtteatet ggtaacaagt etecatgage teetgggeea getecatgtg getggegge
                                                                     1080
aggccgtggt agacgcccag agccagcgtc cctqqcaqqa aqcacaccaq gtqqtccatc
                                                                     1140
ttggcactga agcggccgtg ggcaagctcc cccacaaaqg tqaqcttact gggctcggag
                                                                     1200
tgccgcagca ggtgcgttct gacaccctcg atggcttcca cgtagtcttc caqcaqctqt
                                                                     1260
qtctcctqct tcccqccctg gatccactgc ttcagcaggt actcatagta gctgtcggcc
                                                                     1320
ctggcgccca gcgtgaatac gcccaggtgg gtgaagaggc cactgtgggt attgatgaac
                                                                     1380
```

```
atgggcacca gcccatcctt cttcccagac aggccgtgga tgtgctgtgt caccttctcc
                                                                  1440
actgcctcct gaaacttctt atcccctgtg agacgggaga gctcccggaa ctccagctga
                                                                  1500
atgctggtca cctcggccac agtgctgtcg gaggtccacc gtggcgggtg ggcaactcca
                                                                  1560
gtaccgatgt tcacatccga gtaaggaatc ttggatggtg ttctgaaggc aggcattagc
                                                                  1620
cgatttccaa aatcctcagc tttcctcagg aagaggctgt ccccagacag gtggtaggca
                                                                  1680
ctcaggagcc ccccaggat gcggatcqtq ctctcaaaca qqttqacqtc cacqtccttt
                                                                  1740
tcaaagtgta acttcttcga cacccacttc ctggcttcct caaattcttt cctcagaccc
                                                                  1800
aagatccaca tggtgtccag cgcgtcgatc agtgtgagac cgaggccaaa ccactcactg
                                                                  1860
aaggacctgg acacaggett cagetegtea tggeeceatg caaacttgeg gtateettte
                                                                  1920
catgcatgca ggagaacgtc aatcacgccc ttctggcgat agttcagaat gcactggtgt
                                                                  1980
gccctgtgtc ctggccggtg gcaggggagg cttggtgggc acttctgctc ttcttqaaqq
                                                                  2040
gageteggtg ecetgeteag getegateae egeteeete eagetgatga etgteetetg
                                                                  2100
cggatctcct tccgggcggg gatccacagg ggcttcttgc ctttttgtgg cctcctcctg
                                                                  2160
2220
gatgtgtctt tgtgtcttct gtgacgaaat ctcaggtaag ttctcagggt cggtgtccgc
                                                                  2280
cttctgagga gctggtaaga cgggtggatt tgctggtttt aacccagcaa tttctggcct
                                                                  2340
catcttctgc tcttcctcta gcctgaaagc cagagctttc caatggtcag ccaagttgat
                                                                  2400
gtagaagagg agtcctcaga aaagcagaaa ggcaaggagg aagagaatca tattccgctg
                                                                  2460
caatctcgac agttgcttcc atttcctcca gcacgagcgc cgccgccaac tcttgctgtt
                                                                  2520
gtcatagete tegecaaage teagegteae egagatgaag teeegatgag geggeggegg
                                                                  2580
eggeggtggg tacatgacta cagtggtggc gaeggeecaa ggggeecege ceaetggegg
                                                                  2640
cgtcaggaag tccgactgag aggaaccgag agctccgctt ctcctgccct cgcaggcagc
                                                                  2700
categeageg cegteaacae gaaategteg acceageaag teggte
                                                                  2746
```

```
<210> 5777
<211> 2841
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2842)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2044)...(367)
<223> similar to gi3142288 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5777
ttttaattgt ttttcttttt ctttttttt ttttaataag ttaaagttaa tacaaatata
                                                                       60
aaaaggggaa agtcctctag attcaatgac atccacaaat tgtacattat ttacaccaaa
                                                                      120
agcacagggc tcgtgtgggt gaacagtctg cagtcaaagc cgatgctggg tqtccctqta
                                                                      180
gtgtagcagc ccccgcgccg ggggctcagg cctcaactga gggttttggt catttttcaa
                                                                      240
gtctgaaaag tgggctgttc tccttgcctt tgttgtttct tcttttcctg gccgtctggg
                                                                      300
ttttttctcc acaatggggt ggggtgggtt tgtgtccccg attcacttgc tagtccccag
                                                                      360
aaagggtgtc ccagcccgag actcctttcc gggaaggagg ctccttccgt gctgggtact
                                                                      420
gggtggttgt gatcggaacg tgttcgatcc cctcttctca tcactgctgc tccaactgga
                                                                      480
tttattactc ccgggaatgg tcagagcctt ggttggagcc taagagaatg gaggagggcg
                                                                      540
```

```
tetetetgga gecagaaagg teaagggteg agecaetete ettgetttte teagetgaeg
                                                                      600
teteettete titiggaagge getggeegtt tetgaaggtg etgattgtgt getegaggag
                                                                      660
ctcccctggg aggacttatt tagtgtttct gtgttcacct tcagcatccg cttcctgctt
                                                                      720
gaggagcagt agctgactgg gtgcaggact tcaatgtgct caggccagtg ggcttgcttg
                                                                      780
gcaggggtag tcacagtagc tggtgttcca acagcagtaa aagatqqcct ccttcttqaa
                                                                      840
gttggcgcac cactgcttct tcttggtctc atccaccgcc tgctgcttct ccaactccag
                                                                      900
etgettette accteggega tgageeggte eegeteetge teceagetet geegeatete
                                                                      960
cgccatggtc agetctaagt tgtgtttcat ttcggagaag ctcttgctqq tgcaqccact
                                                                     1020
ggagcttctc tatctcgatc ctcaagcctt gcgaatcttc agctaattgt gctttccaag
                                                                     1080
tagtggtttt tagaaagatc gttgtatatt tctgtccatt gtacctttta ttgcatccat
                                                                     1140
ccaatttgct agtgtacttg gcaatatcag cggcgacatc agctgaggca gtgccgatgg
                                                                     1200
gcaggtcacc gttgactgag gacacaaggg tgctcatgga ccccgagctg gtgaccaggg
                                                                     1260
gcgatgactg tgtgctggtc accagggtga tggtgqacqt gqatqqqctc tgtgtgatct
                                                                     1320
ccttctgctg gacagttgat gaagttccac acgaccgctg cacggccggg gcagtcctcc
                                                                     1380
ttcggtaaaa gcggcctctg ctttttcact gggcttcctg tggcggcggg ggccggggcc
                                                                     1440
gtgacggtga ccgtggagga cgtgctggtg gtggctgtgg cgccagccgc ggaagtttgg
                                                                     1500
gcggaagagc gggtgagcac cggtgtttcc gggggagaat ggctgcccac cgtcgtggat
                                                                     1560
ggtggtgttt tacctacaac atcctgtttg ggagatggtt ctttgggttc cttcttattt
                                                                     1620
tttcgaccct cccgcccaga atggtcttct cctaaatcta tgacaagttc gttcctctga
                                                                     1680
atcagagtcc aggcccaaat gaactgtggg ggaatccgtc tcatcttttc ccttcagttt
                                                                     1740
atccttaatg gggtgaggtg aaggttttgc ctttccggaa aagtccttct caggctcagg
                                                                     1800
gctggccttg tccttgactg ctccagggtc tgccttctcg ctgqctggtg acgtgctttt
                                                                     1860
cagctcctct ttaatctcca ctgggtttgt aggcttgggc ttttttttaa cagcagatgg
                                                                     1920
ctctttgtcc atctgacaac cttctttgtc ctctgtgtct tcctggctcg ttccttaaga
                                                                     1980
cttctgctca tcatcactga tatactcact atcgctacta tctqacttct caqaatcctc
                                                                     2040
cgaatcgctg tgctctacgg ccgtatagac atcttccgag atttcattta tgcctaattg
                                                                     2100
tgctttgcaa ctctctatgg tcttgtcaag attcagctgg aacctgctac gaatctggcg
                                                                     2160
cttgggagag atgagaggaa caggggtgga ctgttgctgg accgactcgc tcagctcctt
                                                                     2220
caaatccatc tcagctttgc ttcgatccag gttaagattc aggatgctgc cggtggtgga
                                                                     2280
ggttttgtcc gttttcgtcg tgataggagc tgacagttga ggagagaagg gctttqqqct
                                                                     2340
gccggataaa ctccctgctt gtcccgtctt ggtggaggct ggtgaagctg tgctcttatc
                                                                     2400
caggaagtcc atggactcct cgctcgcact gaagtggctc gacgtggcct tcttctcaqc
                                                                     2460
atcctgctcc acgtcggagc ccgtgtgcac agaagagttt gtgctcatgg gggagcgcgg
                                                                     2520
catatecque augquaatec qqcqqcctqt qcccccacte aqcacaqqct tqctcateaq
                                                                     2580
gatcttgggg gatgccgtca tgtcaaagtt gagcttgacc ttctcctqct tgtctatctt
                                                                     2640
ggcagtgccg gcgctggggt tggtgggatc gagcagcatt tgatactggc tgttgggtgt
                                                                     2700
gtagggtgtc ctaaatggag agtaattaaa aaccccaaac ttcctgcgga tgttctccac
                                                                     2760
gtaaacctcc atctcttgca tggcactgtt gaaqatqctc ttaqtctttt tcacanaaaa
                                                                     2820
aggaatttct ttagacatga g
                                                                     2841
```

```
<210> 5778
<211> 2522
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1720)...(604)
<223> similar to gi330123 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5778
aagcaacgaa acataaaaca cacaagcgcc ccgtgccccc agtgactctg ggcctcacag
                                                                       60
agcccccgcc agccagcatg gggccccgcc ctgcagccag tcacgcgccc ccacaccgca
                                                                      120
gcccccgtg gctgtccttc caaccccacg tgctttttct ttctcctgcc cgcttctttt
                                                                      180
cttcatcaca aaaggcgtgg agactcggag acggacgttt ttcccctttt ttaaqttatt
                                                                      240
gacgcccage gegeetegee tetteaceea teaaegetgt getttgeeca etggaeteet
                                                                      300
gaagaggggg tggggggctc cctcggtcgc ccaccctggg aagtgcctaa ccttttattt
                                                                      360
tattttattt ttttgaggaa aaagaacgcc tgactcacag gttgaagaaa caccctgggc
                                                                      420
ceteteteat ggeegggtte ecegteeete tgeagagget gggaagggte eeegggetgg
                                                                      480
agecaegggg gettetetgg getgtgeete eggggeeaae aetggetget tggggetgee
                                                                      540
eggggaetee agagggetge aeggeeaece tgeeetgget agagegeaee ceaecqqaqe
                                                                      600
ccacgtgggc tgggcggctg gagggatggt cccccggtga cactgggaga aaggccactt
                                                                      660
ggatgggggc gtttctgttt tgttccgctt tgtgatgtca ccaatttgga aacagcgagg
                                                                      720
gtgggtgggg acttttacag aatattctca ggtgtgtacc cgagaggcag agagagggac
                                                                      780
gtggccggca gctctgtgcg tggccttgtc ccaagcactt gcgcccgccc ccqaqcqccq
                                                                      840
cccccgggga gcgggaagcc agcactcgca ctttggccag gggcgcgtgg aaggtggtgg
                                                                      900
caggcaccgg cctgggcagc ttccaggcct ggctggccac gaccacqqcc cqaqqqqaq
                                                                      960
cccgccaggc cacgccgcac tgagccacag ccccgggggc cgcctcccgg ggccccttga
                                                                     1020
ggcactgagg caccgagact ggttctcccc gagagactcg gaaggtgggg aacgagggga
                                                                     1080
ctgtgtttgg ggaggtggct ttttcgtctg ctgttgactg aacactacag cgccctgtgg
                                                                     1140
ttccgggctt cgcacagctg tcccagggat gggtcgcctg tgctgccttc gcccqccqcc
                                                                     1200
acaccgggac cctgcacggc tgcttctggc ctcgacagat gacaaaagaa acagccccaa
                                                                     1260
aatacgacca ctccaaccag cagttcccgc ctgcctgccc gccactgtca ggcctgccct
                                                                     1320
ggcctcctcg tccgcagggc tgtctgctgg cttctggggg cagaagagcg gggagccccq
                                                                     1380
tggaagggtc aggggagacc aggtcagggc agctacattt ctggtgatca gccccatggg
                                                                     1440
gagacggggc tggcgggata ccgcccccc ggcttcccca caccacttct gtctcacccq
                                                                     1500
gaagcgtcct ttttttgtcc caggtgtcta cctaagaggg ttggtgccag aagcccccca
                                                                     1560
tggcgagtgc tggggcccgg cggtgccctg ggggagcaga tggqqccacc cctqqcaqqq
                                                                     1620
ccgctacaac tttttccagc agcggagccc tctgggggggc ctgtqcttqt qqcatctctq
                                                                     1680
agggcccaga ttgcacaagg tgacctggcc gtggcctgag ggtggagtcg cccagcacgc
                                                                     1740
                                                                     1800
aggccggggc gctgcggggc taagtattag gccttcccag ggaggggggg tgccaagcat
cccagagccg ggctgggacc gccaaaacgt cgtggcctgg atcctctggg tctgagtgcc
                                                                     1860
tgatcccctg cccccaaaa aagcagaggt aggtgttgca ggcccagggc aggggtgcct
                                                                     1920
gccccaggag agtcccaggc agtggttctc gtgccagtgg cacccagggg caaggacagc
                                                                     1980
caacccccac ccttgccacg tgtggggcca cgtgggcatg tggggtgtgt gtttttacct
                                                                     2040
tggtgaatet cacetgecaa egattteteg tgagtgeega eeacettete egaceatgtt
                                                                     2100
acgcccgggc ggcagcagcc cccggccact gcaaacccat gccctgggtc ccccggctcc
                                                                     2160
eccagggagg cateceegtg ceaatgteee ecagtggtgg cageagatee tqtqqeeqqe
                                                                     2220
ctggcggacg ggacccagtg atacttgtat attacacagt cctgatttca gacaatttca
                                                                     2280
accttaatct atttaaaaaa gaatattcta tacaagctgt ttttaagcct tttaccattt
                                                                     2340
gaaatgcatg tgttgtgcgc gttggggatg ggaggagggg ctgaggagcg gctcagtgtc
                                                                     2400
acctcccaca gccaccggcc ctgaccctta atccagacac cgatggaagt cgacttttca
                                                                     2460
tatctttctc ctgaaatgaa ctctgtttta aattggaata aattttgttc ctaaaaaaaa
                                                                     2520
aa
                                                                     2522
```

```
<210> 5779
<211> 3152
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

<222> (2804)...(208) <223> similar to gi433338 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5779 tttttttagt tctttaatgt aaaaaaaaa aagtatatat gagtcagggg tagggagtgg 60 gggtgaccag gaaaagaggg caaaqcaaac aaqcctctgt ctctcagttt cattaaatgt 120 ccagatggag tggcataggc atgggtgagt ggtaggtctt gtagggagga cctgagccgt 180 aggaacatgg ccaggcactg acagcatcac tcgtcgcctt gttgaaggag cagaaggtgg 240 atttcttgga atgagggacg gttcttcgta tctcttctcc agcagctgag catcagcttt 300 attacacagg agtcagggac aaatgggctg gttgagggga ggtaagtctg ccctccttg 360 ggtcttcgga agaactctcc agtatttctt caataacctg tttcatctgg acagctgggg 420 aataggggcc ttttctttga caaaaggtga aagttttccc acaaagtaac ccccaaaggc 480 ccacacatca cttgctgtag tgaacttgcc cagcaagata ctctcccaag acatccagcg 540 gatagggage actgecegge ectggateeg gtaatagtea ecaetgtaea ggtteetget 600 cattccaaag tcagctatct tgattgtgta gttcttaccc actaaacagt ttcqtqtqc 660 cagatetegg tgaacaaaat taagagagga aaggtaette atgecagagg caatttgggt 720 agccataaac ttcagattgg tgtaactgac agtgcgtaca tcgctggagg aagaattagg 780 qqqctcgtgg cgggaaagaa actgattgag atctccattc tccatgtatt cagtgatcat 840 acagagaggg tcatcagtga tacacacaga taatagatgg atgatgtttg ggtccttgag 900 ccgagacatg atctttatct ccttaagaaa atcattcctg gcattcttgt tggcatctgc 960 tcggagcatt ttcacagcca ccaggacagg ctggttggca ctgacatcta gggcaaaatc 1020 tttgtctttg aatttttcca ttccctccac ttcacagaga tgaacctccc caaactgtcc 1080 ttctcccagc ttctctttga aagttaggag tttccctggg ggaaactccc tcccacagcc 1140 acatcttttc cctgagagca ggtccatggt gacggcaggc actgagtatg tgttgcctcc 1200 tgtcactcct tggaggttca ctatgtcagc ctctgcatag tggqqcaccc cctcaqqqcc 1260 actgggctgg actggcttca caacaccgct gcagcctgac tcctcctccc ctggaqcaaa 1320 ttctgggagt tttcgtatca gcctggatgg ctcctggtag tcagggcgaa ggggaaagat 1380 gcgatcgtaa gtcgagttgg accettgttc actaggtgat gaggagcggt tattgttgaa 1440 catgctagaa tcacttggca gggaaaggct gactgtcatt tcatcatcca gcatcctccg 1500 agaagcette tecageattt tetgeeagaa etgeeteeag aggatgatga caatgattgg 1560 caggaggatg aagatgatgg ccaccaagca gccaatcagg atgcgagtgt tgctgtcatc 1620 aactttaagc attggatcat aggttgtggg tgccatagga gaggtgggca gggcttcaga 1680 gttgttgtac attgcagcat ctgattggaa ggtgatctca ctgaacatca tccaggtatc 1740 tgcaaaatgg tattgacact tgatggcact ggccattcgg tggtggagag gcaccgtgac 1800 aaaccgagca ctggggttga cgtcatccag gacaaggggg aaggaaatgg cattaggttc 1860 ccactcactg gcttcagagc ggaagtagca ctgtacctcc ttaaagatct tcacaccttt 1920 agcaaacatg ttgttgcagt ggaccttcat ggtagtgaaa ttcctgatgc ggtcaaattc 1980 aaacatgatc tcaatgtagc cattggtggc actctcgttc cgccagccca catagtcata 2040 gccgggccac acgtggtatt catgggtctg ggtgaaatcg tccaqgccaq acaccatc 2100 ggtcaattgg cctagccctt ctgtcatgct gtatccaaca gctccatcat agacagaatc 2160 attcagataa atgatggaac ctccagggag tacaaactgc tqcccaqctg qaqcattqta 2220 agacaccaag ccatctagcc agacacagcc gtaaagctcc actctcatac acacattcat 2280 ggagtggtcg gtgactggaa tgaaccggac aaatctggct acaatgggcg gctccaagtc 2340 ctttaggaaa atgtcatagg ggttactatt tccatccaqc acctgtttcc catgacqgtt 2400 ccgccaagag atccagcgag tgccatcccg actgtaattg atcttgtaca tgggggcaaa 2460 ctcgatgcca tgacctcctg catggcgccc ctgggtcccc accagagtga taaaatggag 2520 ggtgtgcaag tcaatctgca gaaactcctt caggtcatca ggttccactg gaatctcagg 2580 gcaccagget ccateceett ettetgagte cageetteca tatttggeag etgtggaete 2640 tgaccactga ctggaagctg tgatgtcctc atctggaatc tggcctcctg acatgcccaq 2700 2760 aggatagcgg catatagctg gattaacctg agcttttgca gaactcaaga taggcagcag caggaacagc accaagagca ttctgggaat caggatcatc tcagaagatg gtgttggaac 2820 tggagtatca acgggtgcag agcattctct gtggagcagg atcctcaaaa acagctggcc 2880 tctgcttctc ttcaattatt tcagcttctt tagaataatt caagccacaa accttggaac 2940

```
tttctagagc actgaacccc aggcaacttg taggtctccc ttgatggagg tttcatccag 3000 gggtgcacag ttttggaaag aagaaaacag agctataatc cactgcgttt ccccaaccca 3060 aaaagaagaa tttgttgtga aacgcttctt tttccacttt gctggtgaag gagcccggtg 3120 gtaggcatac atccacaggc tgatgcaaga tg 3152
```

```
<210> 5780
<211> 878
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (752)...(713)

<223> similar to gi5732934 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5780 ttttttttt ttatgagttg gaatcaactt tattgatacc tgagaaaaag ggcaggaaaa 60 atattcctcc tgaccaggtg gcctgtcccc tgaggccaga tcattctctc gcctctccct 120 taagccctgg gtcatttggg acctcactgg ccagcaccca gaggctgaag acatccacag 180 ccagagcctg ggaagccaga cccagagacc aggagaggga atgtctacag cgtggctcct 240 gaggtcaggg ccaaggtcag cgtgggaccc tcatcggtca agggccagcg cctcttggat 300 cactgtccgg agtccgatgg aaaacagctc ctcccatggt tcccggatcc aggcaagcag 360 ggetgteage tgeteetgae acaceaeag gagtgeecaa aageteteea geegggaeae 420 ctcatcgtag aagagcagcc gcaagtcctc aggggctgag cggtagagca gcacggagct 480 caggetgetg agtggetget getecetgae aegeaeagea gggeeeggee eegagggagg 540 caccttctca gaggettege cagatgetge tggaggagag ggetetgeeg gggaccetge 600 agcatcctca tctaacagga acagggtgga cggagtcagc aacagggata cgaggcaggt 660 ggaagggcct gcagggaaag aggcatccag tqtqqaaqqt catqqaqqqq cccaqatccc 720 tggggccagc gtcccagtgc tgctggggag aagaggtgtg aaccacactc tgaggtgggt 780 cacaaagcag cctgtgcccc tggggccaag accetecett teccaagete catgaatete 840 tactctggaa tacctctgcc tcctgggaat tccaccgc 878

```
<210> 5781

<211> 892

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(893)

<223> n = a,t,c or g

<220>

<221> misc_feature

<222> (20)
```

## <223> similar to gil345538 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5781
aaccttatta ttactgaagt cgccttgtta cacacaaaca tctacagtgc ctcctggcca
                                                                       60
ctccttctgg acttttcttt cctagcccag gtcaaagtgg gccttcggga ggaccctgga
                                                                      120
ggagaagccc cctcctcttc acttccaccc tctctcttcc acccctggaa gtcagctttc
                                                                      180
tgacctcaga atcccagcta tcttctggac tcaggtgaca agtcacctaa gtgacagatc
                                                                      240
cagcatgcac tttatgacca tcactctgct cctcctgcat cagcqcccca cccaacagag
                                                                      300
ccgaccaggc tgggaacacc gagaccgaga gcgcqtqqct qtqtctacaa aqqcctcctc
                                                                      360
tttgagggag acacgcgagg cacgggtggg gcgatgagac aggatcggcc ggtccttgac
                                                                      420
agtetetgaa getgggagaa catgaceeca tgeteteetg ttggagteae cacetetttg
                                                                      480
ccaacagcca ccaaacctcc acctccaatt aagctccacc cccatgtccc cactgccctc
                                                                      540
eggacatetg tteageacee ecetegacet ggecaagget ecaegeaceg ecetggttte
                                                                      600
ccgctctgcc cagcccccg ctgaagtctc taatqqqttc ttccqattcc acctqtccaa
                                                                      660
ggtaaaaccc tgaggttgtc cctcctccgc ggcacctcca ggtatctggt tgctcaggct
                                                                      720
gaaatgtttc ccaaggccct ggctcctctt ctttccaaac cccqaaggca gctgattagc
                                                                      780
aaattttgac tctaacctca aaacatgttc cagaattcag ccacattctc cccacttccc
                                                                      840
cgcctggccc tgggccccgc tattccatct caatctctqc nccqqcqcqc qq
                                                                      892
     <210> 5782
     <211> 1207
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (282)...(1125)
     <223> similar to gi5732634 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5782
ggaggcagga ggtcgggctg gggaggtgca catagtgatg ttaacttttt cccqtqtqta
                                                                       60
aatatggaca gccgaagggt cgtgtaaatg ttctgcaaaa gtgggtctat acagagtgaa
                                                                      120
agctatttat tttgtgcaga gaaaaaagtc tggagggatg gaaccttcag ggtttattca
                                                                      180
tatttaagat gtagcttttt gttgtttcag gcattatgta taaagcaacg attattttat
                                                                      240
ggaccaagtt ttcatgtaac tgttgcagtg aaagtgcaat atctgacccc cctgctccca
                                                                      300
gcaggaagtt gcttggcccg acaatcacag cccctgtcag gggccctgtg gccagtgcct
                                                                      360
cctcctctct tggccccacc ttatcctgtc ttgcctgctg cctgggagac cagccatcca
                                                                      420
gagaagcacc tggaagagtc tcgggccctc ctgcaataaa ggccgggagg ccctqtqqqc
                                                                      480
agtgggetea geeteteece aggggggeag eteeceaeg geteeteaet eecegeetge
                                                                      540
ctgcccagec gccagecatg ccaaggacaa cagcaatagt cccctggggc tctcccageg
                                                                      600
gccctcagcc atagatggca aggtgggcag cctgccccc catgggaagt ctcttctgta
                                                                      660
tocaggicing cittecacci cociteagat tectitinge acattetect citiqaqqaaq
                                                                      720
taccagtett tetgaaaeta agagagggag ggeagegtee tttaaaaata eeaaaaatgt
                                                                      780
ttacagagtt gggtgctgag ctgcaqqqct caggcctgac cagtcataac caaagggtga
                                                                      840
ggcaggcctt gctgactgcc acccccaqg cctqttagaa tagaagcctt agtcccactc
                                                                      900
```

```
ccaccacace cccacgccc accactgce ttetettga ttetaaaga gggggttcag 960 cagagaccc ccaccctce ctggctcggt ctgagtcca ctgcccacc catcacagcc 1020 tteacgtete ageccetec gtetggtetg tecgtgtgc gtetgttet ctgggccatg 1080 tgtgagcagt gteccatet ecceatecgt ecctgetgte eccegcateat tgggcetgag 1140 tgtgctetgt atacaacgte atgtetgtta caccaattaa agaageggga aggettcaaa 1200 aaaaaaaa
```

```
<210> 5783
<211> 2131
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (395)...(1798)
<223> similar to gi483843 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5783 ttttttttta caaagaaggt ataactttaa taaccctatt tacagataag aaaaccaaga 60 ctcagaagtt aaatggaaag gtgaggtctc tgaactaatc cagactctcc catgaggttc 120 ctttggcaag tcctgggctt ctgtcctcat ctgcaaaatc gaaagcattc ctgaggtttc 180 ttccagetet geateateag agttgggaag eeegeeteea ageeeggaag acceqeetee 240 tctgtaaggt taaaggagga agaggcagag attggaggtt caggcagtga cgtaacttgc 300 tgccttaggt ggccttccgc tctggcggct gtcgcgacgg gggttcaggg aatatttact 360 gggcctctcc gctccctctg ctcttggagg tgccatgagg tcagttagct acgtgcagcg 420 cgtqqcgctg gagttcagcg ggagcctctt cccgcacgca atctgcctcg gagacgttga 480 taacgatacg ttaaatgaac tggtggtggg agacaccagc qqqaaqqtqt ctgtgtataa 540 aaatgatgac agtcggccat ggctcacctg ttcctgccag ggaatgctga cttgcgttgg 600 ggttggagac gtgtgtaata aaggaaagaa cctgttggtg gcagtgagtg ctgaaggctg 660 gtttcatttg tttgacctga cacctgccaa ggtgttggat gcttctgggc accacgagac 720 actaatcgga gaggagcagc gtccagtctt caagcagcac atccctgcca acaccaaggt 780 catgctgatc agcgacatcg atggagatgg gtqtcqtqaq ctqqtqqtqq gctacacaga 840 ccgtgtggtg cgagctttcc gctgggagga gctaggtgag ggtcctgaac atctgacagg 900 gcagctggtg tccctcaaga aatggatgct ggagggtcag gtggacagcc tctcagtgac 960 tetggggcca etgggtette etgaactgat ggtgteteag ecaggttgtg egtatgeaat 1020 tctactgtgt acctggaaaa aggacactgg gtcccctcct gcctctgaag ggcccacgga 1080 tggtagtagg gagaccccag ctgcccgaga cgtggtgctg caccagacat ctggccgtat 1140 ccacaacaag aatgtctcca ctcacctaat tggcaacatc aaacaaggcc acggcactga 1200 gagtagtggc tctggcctct ttgccctgtg caccctggat gggacactga agctcatgga 1260 agaaatggaa gaagcagaca agctgctgtg gtcagtgcag gtggatcacc agctctttgc 1320 cctggagaaa ctggatgtca ccggcaacgg gcatgaggag gtagttgcat gcgcctggga 1380 tggacagaca tatatcattg atcacaaccg caccgtcgtc cgcttccaag tggatgaaaa 1440 tatccgtgcc ttctgtgcag gcctgtacgc ctgcaaagag ggccgcaaca gcccctgcct 1500 cgtatatgtc actttcaacc agaagatcta tgtgtactgg gaggtgcagc tggagcggat 1560 ggagtctacc aatctggtga aactgctgga gaccaagccg gagtaccaca gcctgctgca 1620 ggagctgggc gtggatcctg acgacctccc tgtgactcgt gccctgcttc accaaacgct 1680 ctaccatcca gaccagccac cacagtgtgc tccctcaagc ctccaggatc ccacctagct 1740 gtacttgcct catagctggt gaaggattct tctgaacccc caccctaccc cctaaaggcg 1800 tctttggatc acactgcgcg gctgctggct ccatcacaaa acaatgaagg aggaagtggg 1860

```
acgcagagag aaacgcacat ggggagaacg ccacgtgaag gctgaggtcg ggataatgca
                                                                     1920
tctgcaagcc aaggaacacc taagaggacc agcaaaccac cagaagccag gggagaggcg
                                                                     1980
tggaacagac cctgccttac agctgtcaga aggaaccaac cctgccaaca ccttcctgtt
                                                                     2040
gtactttcag cttccagaac tgtgcctgca gggcttgaga gaaatggaga caaagaaggc
                                                                     2100
cgtgggcagg aggccaagag aagcccagca g
                                                                     2131
```

```
<210> 5784
     <211> 1120
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1121)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (1078)...(224)
     <223> similar to gi6002599 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5784
ttttttttt ttaagagaaa aggcttttta atatgaaaac tatgtatttg ggcacaaaaa
                                                                       60
tgcaacacac agtaagaaac catattctat caattatgat attctgtaat ctaagaacac
                                                                      120
agaaagtttt gttattagga aatgccaaga ggaaaaagaa ctctgtaaag tcctattcaa
                                                                      180
tttactttgt tagggaaaag gatgtttatt tggcttttgt cacagttcca tcatggctta
                                                                      240
ctcttcttgt aagttcagct tcaatgcctc gctagttctc agctttgctt cttcaattct
                                                                      300
tcactttgag caatgagacg gatttcggca ttaagtctaa ataggactcc aattttttcc
                                                                      360
ttcaaaggta tagtctgttg ctttaatctt ggccagtttt ctctgatgag tgctactaag
                                                                      420
gactggatng agacagagaa agcatccctg gcctctggcc gaaagttgct cccctgcagc
                                                                      480
ctggatccca aatctgaatt cctctgactt ggcttttaga aagtcccatg ttctgacgac
                                                                      540
gattatcaac tttggcccct ttctgtagac agatgcaact ctgctttctt gacatcctct
                                                                      600
tgtagacatt tttctaatac taaagttgca gttaaatttt tttcaagttt ttccagttca
                                                                      660
atcttgattt cttcactttt ggatttggta cgaaagagat cagaggtcaa atcattcact
                                                                      720
gcagggataa aactagctag cgaggtatcc tttgtttcaa gggccaccgc actgtcaacc
                                                                      780
aaagcattca gatacctgga accagtgcta gagagattgg cgggggaaaa attcacactc
                                                                      840
tccatgagaa ggtcttgaag atacttggct tctgactcgt attcacttgc tttctgcttc
                                                                      900
aagteeteta ttaeeaggta gacateeetg teeeggaeee tgttgegtte tgaaaggtga
```

tqtaaaatct ctgtggtccg tgggttcacc tcatactgtg gaataggatg atctccaaat

attititta accacgcage aacctgcgtt teteteet eetgeggete catagetgeg

gctcccgcca ctttactagg aactcctagc gggagatgcg

960

1020

1080

1120

<sup>&</sup>lt;210> 5785

<sup>&</sup>lt;211> 3022

<sup>&</sup>lt;212> DNA

```
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2574)...(1107)

<223> similar to gi30821 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5785 tttttttttt ttcaggagcc aaggaagttt atttactcta ctgggtgaca ggagggcaga 60 gtgctccaga ggagacccag atacatcaac caaggacttc cctgagattt ggctttgctc 120 ttccaggcct gcacatgctg cgtgatgaaa tgaggcctgc ctagacatct gtgagggcct 180 cgagggctgc tgcctcgact ttctccctag ctaagtccac ccgtccaggg acacagccag 240 ggcactgctc tgtgctgact tccactgcag ccaagggtca aaatgaagca tctgcggagg 300 ccaggactcc ttggcatcgg acacagtcag qqqaaaaqcc accctqactc tqcaqqacaq 360 agggtctagg gtcatttggc aggagaacac tggtgtgcca agggaagcga gcatgatttc 420 tggagtggac tacatgcatg gtctggagtt cagtaaactg gaaagtttca cccccaaqtc 480 ttaatttaat caaaattgct gaactctgtt caatcttcat tgttaaaagc agctttaaag 540 ctgggtgatt tcttagtcaa atgtataacg aagcttttac ttatcaattt ctttttggga 600 gggggcatgg gctgaaatac atcttgtgct caataaacct ccccacatca atatttcaaa 660 gcactttcta ggttacaata atgacatttc aattccatat acgcatacat agaatatata 720 tttttaaaca gagtgggtct taagagtata cttggaaccc tcgqaqtcct ccatqqacaa 780 gaacagggtg gcccatggac ttccagccaa aggctccact gtggggctgc tttggggaga 840 gacteacage tggaettete tateegacea tgeaatgtta gecageacea attaceeaca 900 atgctttgcc cataagagat agaaataatg gaactcacag gaagaaacag tattgataac 960 atacacaggc ttacagaggc caggcccagt aattaccatg agacagaagc ctacaggtgg 1020 cggtgctttg actgggctgg gattattgat acatttactg attacatcac ttcttttata 1080 aggcatatgt taaaacgcag tgctacttga aagtcgaaag gcacagcttt ccgggggagt 1140 catggaacte ctttcactat ctcatccgtg acctcctttg cgccggggcc tgqttqctct 1200 tgcgatcaag gggctgcaga acctcctatg agtgcccttc ttgaagctca ccaggtgagc 1260 ateggeteeg etggtgtaaa teetteeetg atetggeteg aacetggteg teggteeteg 1320 gagaagaagg tcaggtacct ggagagcaca gtcaacatca cagttgccgc ccaaactggc 1380 tgtggtccct cgatgggttc tgtccctcca gaaaacgcat gcttattgga ccttgggttt 1440 gacctgtttg gccctgtcgg tgaggaagat ggaggagttg gggtcgctgg cactcatttt 1500 ggtctgggcg ccctgcaggg ctgggaagaa ggtggagtgc aacagggctg gtttaggata 1560 gccgatccct gggggcgacg tcccttgtca ttctaaaqta aqqatccctq qtcaatqqca 1620 catgggataa ggcaactgga tatccgtcct gtctcggaag atctgtggga aatgagttgc 1680 tgaaaggagg gagcagcctg gatggcagga aaacttgatc tttcccaatg gaagtcgctg 1740 tcagtgaagc ccgaaaatgc ctttcacttg ggttgaaagg tacatgcttt ttgaatcttc 1800 accacatttt ttgtagaaac ctgagctcat ccccatgtag tcccaggtca gagaatatga 1860 aagtottgtt gatgtcaaag cgacaggcga tgatgtcctt ggcattctcc acagcatagc 1920 tataggcctg gtccagggtc aggtccttcc acagatactt ctcgtcatcc gtcatctgga 1980 tgaccaaggg cacgttaaat acatcctgga gccactttgt gaaaaataaa tggaatgagg 2040 tgacctacat gcattgcttc aagaagaagg gccccggccc gtgtacagat aaaaatggct 2100 tettaatttt cataggeaat caagaacetg atteatatet etgtgtgaga agaagatgee 2160 tctgcgcagg gaagtggtgt ggtctttggc cgggtggctc tctctattcg ggtttattag 2220 ctctttgtca attttactac ttccaaaacc gaaccaatgg agcttaaccg tagtctaatg 2280 cccttttgca ctgcttgtct gtactgtcca tgggtccaca aaatcctctt cagcttctgt 2340 ggcatctggg ccatgattac tggtaggtgc tgggttccct ggaggacagt cagccttgta 2400 atcctccccc gcggcagctt tgtagctcat ttttaatgac accaacatct ttactqcaqa 2460 atcaatttca teetttgaeg cattteeege tttgagggae ettaegaget eecettgtgt 2520 ggcgatgctg ttgaacagct ccagcagaga tgcgggctca ctgttgggca tgtttgctat 2580 ctctcaggaa ctacgttcac agccggcctg aggtcagagg atttgttcag cagacgagtc 2640 aagaccaggt tgtggaagac actgcagagg tggccactgg tcacqctqqq caqttqaqct 2700

<210> 5786

```
gctgagagtg ccctgccag ccagaaatgg tctttaatac tcttccctc tttcttcag 2760 tttcccttct gaaaaaagat gctttgtct ttcgttctcc ccaccctgca ttcagctaag 2820 ggtttcttat aaatcacca gattctcaga aacacttgag ctcttgacca accttcttga 2880 tgagactgtc caatcagggg tgggttgcct ggggggccag gttgagacca atgaaaccct 2940 cttgagaatc gagccattag ctggtcattg catcagccac ccctcacccc ccgctggacg 3000 aaatcgtcga cccgggaatt cc 3022
```

```
<211> 1829
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1417)...(1828)
<223> similar to gi4191327 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5786 60 aaaatttaat tcaaatcaac ttttaaaata atttttcagc ttagtaccat acagttgttg 120 tccagtattt ttagaaaagt aaagtcttag catgaaactt ccttaaccta ttttagcctc 180 atgcttttga ctaaaataga cttaaaaact gaattaaatt tttatataca cttatattta 240 attaatctaa agagatagct tacatataga aattaagtaa aggggagatc tgtattttca 300 ttcaagatgt taaaggctag cacagaaatt ttctaggcat taaatcattg cttattacat 360 aatgttttta atagtttgct ttgatatcag tattgtgaat aacggagcaa attcagccat 420 attagttctg ttgacttcat gctcataatt ttgagaagtc caggcgtaaa ctaaaactct 480 tttggtgtac ttgaatattc tttgtttgtt gatgtaaaat atgtaatctc tgattttata 540 gttaacaata aaaataaaat tttaggtgag tgaaagcagt gatttaaatt taacagtqtc 600 ctcttgaaaa accttaatca cagttaagtg atggcatggg caatgaattt taatcatatt 660 taggaataaa atactagata ttagtgtata acaattagat atatgttaat tgagcactac 720 aaagcctgaa agcttaacaa agtggggcta taactagtaa ttttttggta aaaatatagt 780 gatctttttc tacagggtat tattataagg gacaaattat agttgtaaat tagattaatg 840 aattttgtga gttttaaagt ttgtacgaac catgtctccc ttgtgtcata ttttccaata 900 atataattac ctaacaatga cagaattata cattttccct ttaattctct aagcattgag 960 taaacagaaa aatataggga tgaaatacac acatqccaac attcaaaact ttqtactaac 1020 tagaaacaaa aatagaaggg gatttataaa ggaaaatgat ggagacattt tagagaaatt 1080 aagtataaat cgcaacattc tgttttcttg gatgtattct gggtagcttc tagttacttg 1140 taaacaaagt attcattgtt tttgtaataa agtgataatg ttttgtttta tagttgagtg 1200 gctttagggt aatttaatca cctggaaagt gatatttttt taattacctt ttgttactaa 1260 atcttatcta atttaaaata ctatgttttg aaagtatata tcttgtatag ttatcttttt 1320 1380 atatgaaaat gaactctaat acatatcttt ctttcagtgt tcatatcaca aagctcaatt aaatggtcct ggaaaaaaaa aatcgttcca tgttgttcca qgtcccgttc aaqaagttct 1440 tecagttege agteaagate tegtteeagt tecagagaae gttegagate tegtgggteg 1500 aaatcaagat ccagctccag gtcccacagg ggctcttctt ccccacgaaa aagatcttat 1560 tcaagttcat catcttctcc tgagaggaac agaaagagaa gtcgttctag atcttcttca 1620 tctggtgatc gcaaaaaag acgaacaaga tcacggtcac ccgaaagcca ggtgattggt 1680 gaaaacacta aacaaccctg agcccagggc caacccctac ggaacaccac tactttaccc 1740 agacgccaca ggtcatcatc tggatcatcc cattctggtt cccgttcaag ttcaaaaaag 1800 aaataatgta ttaaaattta catcttaaa 1829

<400> 5787

```
<210> 5787
<211> 1327
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1085)...(884)
<223> similar to gi288145 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
cccacgcgtc cgcggacgcg tggggaaaga aggcgccgca gctaagccca ggtctctcct
                                                                       60
ccgcaggttc cagctccttt cctggagcgt gtgtgggggc aacaaggacc catgggttca
                                                                      120
ggaattgatg agctgtcttg atctcaaaga atgtggacat gcttactcgg ggattgtggc
                                                                      180
ccaccagaag catttacttc ctaccagccc cccaatttct caggcctcag agggggcatc
                                                                      240
ttcagatatc cacaccctg cccagatgct cctgtccacc ttgcagtcca ctcagcgccc
                                                                      300
caccetecca gtaggateae tgteetegga caaagagete aetegteeca atgaaaceae
                                                                      360
cattcacact gcgggccaca gtctggcagc tgggcctgag gctggggaga accagaagca
                                                                      420
gccggaaaaa aatgctggtc ccacagccag gacatcagcc acagtgccgg tcctgtgcct
                                                                      480
cctggccatc atcttcatcc tcaccgcagc cctttcctat gtgctgtgca agaggaggag
                                                                      540
ggggcagtca ccgcagtcct ctccagatct gccggttcat tatatacctg tggcacctga
                                                                      600
ctctaatacc tgagccaaga atggaagctt gtgaggagac ggactctatg ttgcccaggc
                                                                      660
tgttatggaa ctcctgagtc aagtgatcct cccaccttgg cctctgaagg tgcgaggatt
                                                                      720
ataggegtea ectaceaeat ecageetaea egtatttgtt aatatetaae ataggaetaa
                                                                      780
ccagccactg ccctctctta ggcccctcat ttaaaaacgg ttatactata aaatctqctt
                                                                      840
ttcacactgg gtgataataa cttggacaaa ttctatgtgt attttgtttt gttttgcttt
                                                                      900
gctttgtttt gagacggagt ctcgctctgt catccaggct ggagtgcagt ggcatgatct
                                                                      960
cggctcactg caacccccat ctcccaggtt caagcgattc tccctggcct cctcctgagt
                                                                     1020
aagctgggac tacaggtgct caccaccaca cccggctaat tttttgtatt tttagtagag
                                                                     1080
atggggcgct gagtggactg caaggtggac aggagcatct gggcaggggt gtggatatct
                                                                     1140
gaagatgccc cctctgaggc ctgagaaatt ggggggctgg taggaagtaa atgcttctgg
                                                                     1200
tgggccacaa tccccgagta agcatgtcca cattctttga gatcaagaca gctcatcaat
                                                                     1260
tcctgaaccc atgggtcctt gttgcctcca cacacgctcc aggaaaggag ctggaacctg
                                                                     1320
cqqaqqa
                                                                     1327
```

```
<210> 5788
<211> 2029
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1944)...(1946)
<223> similar to gi868213 in the genepept database release 114,
```

```
<400> 5788
tttqatggaa aaatggaatt ctcagttcat ttgaagaata cagattagca attaaaaaat
                                                                       60
acagcagtat ctcaggaaat aaacattatt ctcattttac aaaaaagtgt atgtgaactt
                                                                      120
taaaaaaatc tacactacaa tatgaattga tattatctct gggtagaatg ctaacaattt
                                                                      180
tattttctcc tttactgtat tcactaaatg tttcacatta aatgttgtat tacctttgaa
                                                                      240
atcagaagat acattgtcta aaactgatac atcaaggaaa tagttgtata aggcatatta
                                                                      300
cctaaacaca gagggttacc aacaggaaat taaaagtggg ttaaaaatga ctcctggggg
                                                                      360
gaactgtaag gaagagggaa gggtgaaggg gaaggaaatg ggttgctttc cattctaaat
                                                                      420
cttcacacaa tctattctta aaatcagaca agggctgtgg taaatttttt caattattaa
                                                                      480
aaaaaattat ttcttctaat aggaataggc ctttgagaac cctattaatt gtaataggtt
                                                                      540
tcaattcagt tagtcactca agtattataa aatgcaactg gatttacaga aataatttcc
                                                                      600
tacctacact gacagtatat ttaaactaaa aaaaaagcat acaatgtaca aacaaattta
                                                                      660
tttacaaaaa ttacaattac aaactgtaca aattgagaca atttcccatg cctccaacag
                                                                      720
aagccaagag cctttactgt caaatggcag tttttgttac ttttaaatga cacacaaaaa
                                                                      780
gaaatatgat gcctattcag tcatccactg ccagtttaaa aatgcttttc taaataattc
                                                                      840
caagaagcct attagtgata tgtatatgga taatttccct caactctatt tctagaatgg
                                                                      900
ctatgtacaa atccagcaaa actggaacag aacagggtaa gaaagcacat agcaactgct
                                                                      960
ttttcaacag taaattttga ctattcccct aaatatctac ctagtggctt aaaactaaaa
                                                                     1020
ctatggtctt tggctttaaa aagaaagtca aaaaattttg acttttaatg actgcacaat
                                                                     1080
tctaccaaag ccagtgttta cctgggtatt ttttgtcacc tgtagtttac atttccctgc
                                                                     1140
tactgttaaa gaaacagaat tctacagtat tcaattctgt atattgtctt ttaaggtttt
                                                                     1200
tcaatcagac tcactactac tgcttgagga gtccqttgac ataatctcta catcatcttc
                                                                     1260
attttcttta ttatgcccag gaggttccaa caaaaagtca ctactatgat ttggtggtaa
                                                                     1320
catattcatc gacatgtcat ttgactgcca tggatactgt ggagcaagga catctggcaa
                                                                     1380
tetteetget geaagtgeat eteetggtaa atggeeatte aegeeattag tggaaggatt
                                                                     1440
gttcatctga cccagtaacc cacttctcat ctctaaatca gttgggtagg gtctccgggg
                                                                     1500
gtcccctgga acccaggtca gtggagcaca tacagcatta cttgcactga tcctatgtgc
                                                                     1560
atacttaatt atttcttcag aggagatagc accttttctt gctttttcta ttgacttgag
                                                                     1620
tttctccttc gcttggtaaa cagctgttgc cagtatttgt tctgcttcct ttagctgttt
                                                                     1680
ttgtagctgc tgaatatcac tgtctctctt ctctacttct ttttctaaaa cttgcatttc
                                                                     1740
atgatgaatt tttccctgat taagtgccaa tttcattagt tcttgaaatt ccccatctcg
                                                                     1800
gtgaattaac aactccagga cctggttttc ctctccagcc tgtaacaact tttggtttct
                                                                     1860
tgaaattgcc agcatttcta taagttccct agacaggacc tccaagtcct caagcgcaga
                                                                     1920
cagcagccgc tctcgtgtgc tgttaccacc cgccactccc aaaccgcctc ccagccgctc
                                                                     1980
cttctccttc tcaccactcg aagacgcagc cattttcccc agagtcccg
                                                                     2029
```

```
<210> 5789

<211> 3356

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3357)

<223> n = a,t,c or g

<220>

<221> misc feature
```

<222> (2848)...(1116) <223> similar to gi5748565 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5789 ttttttttt ttccagttct aaaaccaaat ctttattctc tagtttgaaa aggaggggta 60 aatggttgtt ctgtttagtt ccagagaaca gaacaaggcc caataggtag aaattatagg 120 aaagcagaat tcattcatta taaggaagga tttctaacaa ttagaatttc taacaattag 180 aatcatccag ggcctcagga ggtgcggaag ttcctgtcac ctaagtgctc aagcagaggc 240 caggtgtcca tatgctagaa atggaqaaaa qqaaactcac caqcaacttc ccctcagctq 300 gccctccatc accaatgcgg cagtccttgc cgtgacatgc tgagctctgg aaggagcgaa 360 ggaggggctg cggtgttcag acaagagcct ggacacagtg ctqctqacaq ccaqqqqaqq 420 ctctcagcgc tgggaggggc gacagataaa gcgagacaga ccaaqqagta aatqccttqq 480 ggtctgctct ttgggaagga agaggatgga agtactaaca gcagacgggt ctctccaagt 540 ctgggtgcct acgcaggggg caggtgggag gggaagggag aggtaagagt ggcttcgctt 600 cacctettge tgetggcaaa ggcccaaqtq etqtetaaca aqqccaqcaq qttetecaaq 660 ctgtatctag cccagagcat tcatttacag gactctacca cgcctgcttc caaaaatgat 720 cttaagtaac ttacagtaaa agacaggggc attaaggcgt taataccaga ggatggaggg 780 tcttcctttc cactggtggc tcctctagcc agagggctct aaggggcgga tgctattgct 840 gcttttccag ggcacagggc agtcaggacg gagccttagc acacaccagc tqqaqqccqq 900 cgtccctgcg cttggaagtg ggttccctgg ccaccggggt tgacctctct cgctagcagg 960 gcccacccag ctcactcccc gcgtcttcca tcccctctag gattcccatt gtcccctact 1020 ccagcactag gcaggcaccc ccagcccact gcgactccca ccacqaaqqa ccccaqccct 1080 ctctcagcca acacggcccc gcccaccgtc tcagacatcg tgcttcttct ggtgggccag 1140 gagtctctcc tcgtcgtcga aggtctggcc acagatggca cagcagaagg cgccgtcccg 1200 gatgtggctc ttgcggtggg tgatgaggtt ggacttctgg ctgaagctgc ggtcgcagtc 1260 gggacaggcg tagggccgct cgcccgtgtg gatgcgccgg tgcgacaccq aggttqqact 1320 tetggetgaa ggetttgegg eagtegggge agaegtaggg etteteggee ggtgtggeaa 1380 teggeeggtg egeegeeagg tagggtttgt ggeggaagge ettgeegeag tegggaeaca 1440 cgaaagggcc gaatcggggg gcgttgggtt ccgccgaatt gcgqccqcca qattqqcttq 1500 cccttggaag aaaacgccgg ccgcacttcc tcgcaaggcg aaagggccgc tcgccggagt 1560 gcacgcgcga gtgcgccacc aggtgcgtct tcttgccgaa gttcttcccg cactcggcgc 1620 aggtgaaggg ccgctccccg gtgtgctgcc gctggtgggc ccgcaggaag cqctccagcc 1680 ggaageteet geegeagteg tegeagetgt agagggaggg gggggetteg ategggteet 1740 gegggtgete tggeggggee eetggeggeg geteetggge eggttteaga ggtaceqeeq 1800 gggtgggctc ggccgcggac tcctgggggc cggctggcag ctgggggctc cccgggccgg 1860 gggcggcctg ggccgacccc tcggatcqct tqtqaatctt qctqtqaqac aqcaqqttqq 1920 gtttgtgccg gaagcggcgg ccgcactctt tgcacqgqta gggctgtctc gccqtqtqtq 1980 tgatgcgccg gtgtcgaagt cagatagggc ttattggtaa agcgcttctc cgcactcgcg 2040 gctacttggt ggggtcgctc gcccgatgtg cacgcggcgt gtgagcngat caagttgggc 2100 tttgtgccgg aagcgcttgc cacaacaggc acacatggaa ggggcggtcg acggcatctc 2160 caccggngcc ggggggcgtg tcacccgtgg gggggcccct gggccggggg ccccagaaga 2220 cettggctgg cgggcctcgc tectagggcc gteggctaac gtgcacccgc ttgtgggcaa 2280 ctttagctgg tcccacgtgg gcaaaatgct ccggccacag ttgccgcata tgaagggccg 2340 gggccctctc gggcgggaag ggtggcaccg ccgcaggatt gagctcgaag ctgcctttcg 2400 tegecagaaa gegteteteg eeattttggg acaagegaat gggeeggett ttgeagetga 2460 atgggcccgc agatgcagaa ccagggccac ccagcctcgg aagctctgcc cacagaggtg 2520 gcaggcaaag ccccagtctg gggtggcagc agcatggacc tggcggtgca gtgctaagaa 2580 2640 caccggcggg tgtgaagcca cagaggccac ccagccaggg aagtgccttc gacagtgggc 2700 acagogatgg goodtgootg gggottgggo accagactag ggccactgac gtgccttgtt 2760 gcctcagccc gcgggactcc ttccccaggg tctggggtga ctcctgggag ggcccagaaa 2820 ggagtcgggg ctgggccggg cccatggcca gggggcccct gcaacgacgt tccagcatcg 2880 gttcttcctc tgcaagaaaa atgtggcnac tgctccctac agtgccttna tgctgccctc 2940

```
tccctgtgtc tgctgtttcc tatgccacat ccgagctgca cagcaactct gagaagctgg 3000 acaaacagac actgagctcc cctggagact gcagagctgg ggatgaggct ttttccagct 3060 cctcttgggg atgttcctgg ggatacttcc gcggctgcag cgcctgcttc ggcccacact 3120 ccggtagccc ccaggtgtta gagaaaactg cagtaataaa gacaccccta tccccatggc 3180 agagctcaga cctctgactg cagagggcc agccttacct ctgcggcggg ctgtgcaggg 3240 acgcggcgcc cgtccatgga gcccgaaggc cggcctccgc ggcccactct cgctcccgc 3300 cccgccgcgg cgacagcgc aggttcgag ctcgtgcaa gcttggcgta atgagt 3356
```

```
<210> 5790
<211> 2319
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2082)...(514)
<223> similar to gi5764665 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5790 ttttttttt ttttaaagtg caaatggctt ttattgaggg cctactgtgt gctgggcaac 60 atgtctgcaa gggtcctgct ttacctccct gtactttgca ccggccaggg aggagggtgc 120 tggggagacc caaacatcaa gctgggggag ggtgctgagg tggaggtaga agggggcaga 180 ggggcccctc agctgagtcc ttagggaggg aagggatcct ggggtctgcc cagcttgaaa 240 cagaagctgg gggccacaag gccctgaatc aggccaggca gggtacaggg qcctqqqaqt 300 cctgctcctt tgctgtgaga cctttaggga atgggatcca tctctgagtg gtttctcccg 360 atgaaagaca ggtccagagg gcagagtggc catgcccaag gtggtggcca ggtctgacag 420 gatctgcagt ccctgccaac aacctcctcc tctgctctct gggcagtagt ggcctgctcc 480 tggacactgc tttgcagtca tcacctggac ctagagctca tctcggggct ggggttggag 540 gctgtgcccg ctgctgccag tcaggtccag gcgggggctg cgcagggtct tttgggagcc 600 gctccagctg atgaggcggc cgctgtcatc atcccatgga gaggatgtct ccgtgtcact 660 gagccactcg gcgtccccgg catagtgggt aggggcagcg agcaggggct gggcggagaa 720 ggccaccagg tcccgtggcc agaagtgtgc cttgtactgc tcgttggggt gctggtcgaa 780 catgatgggc aggaactcgt ccacgggcag catgcggcgc agaggctgtg aggccagcag 840 cttgcgggca cccgccagac gcagggcata ggccagcgtc cagtaggagt acccagccac 900 caccaggeee ggeageeet ecaeggeegt eteettetea gggtteacet getteegtee 960 gaggtagate aggteceaag aeagtttete tgeeteeaca teeteeatea geeegeteea 1020 geegeeeet gaagttgete teaaagegea egteatteet teaaacaace aggaeeeegg 1080 ggccaggccc cctgggaaac cacctcttcc ccagatggag taatggtctg aggaaagcaa 1140 geceaectee getettggte agagtgegge eegagtaagg gteetggtag eeegggagea 1200 ggtctacgcc gaggttcctg atggcactgc tgttgagcat ccagccatcc acagcgtcca 1260 ccaccctccc agagatetee ateteccaga gegaggegag catgegttee egaeggteag 1320 gcctgcgagc caggctgatg acaaagacct cgtcaaaccc tatcttgctg ggcctcttag 1380 agggccgagt cacatgagct gaggcctgca tgcgggggcc gtccactagt gcttctaaga 1440 tcaggtggat gaagttgacc ctctcgtctt ccagcccctg gtgggatttc accggcacat 1500 tcatgtaccc ataacggtgc tcattgcaca cgtggacgga gaccccagca gcctggcagg 1560 cataggcgaa gacgatgatg tcgtcgaaag gccaagtgta gttgggatgt ggcgggtaga 1620 aagcaagctg gtctgcccct tcagcccgca gggatgcaag gaaggtggag tggaccatgg 1680 ggacacggaa gcagccccgg cgctggcggt tcttggtggg gaagtactcg gctgtgcggc 1740 ggtagtagcc ctggggggtg atcccacacc agaagttgga gtagtagqtc tgggagtcca 1800

```
gcattggggc caccactgga agcccctgcc ccatgagaag ccgcagagtc tgattgttgg
                                                                     1860
tcagaatgtt gtctgtgtct gcaaacagga tatagtcggc ccccagttc ctggcaaagg
                                                                     1920
tgagggcttc ctgcttcagc tccatcagaa actggtgcct ttctttggtc cagtgcttgg
                                                                     1980
gaccetette atetgggtag aacetggget egeceteagg eetecagaee acageageat
                                                                     2040
agtcatcgcc cacagccgcc agccactcct gcagcatctc tgtggtgttg tccacattgt
                                                                     2100
ggtccgtggc acaccagagg gccatcctgg cccgggggta gtccagccgc tccaqaqcqc
                                                                     2160
ccaggtagtg gggcagcgag tgttcggcat tgcgggccag gatggcaagg accacggcgg
                                                                     2220
gcagcggcga ctccgcaacg cccgcagcct ccagccacgg ccccagcagg agcagcagct
                                                                     2280
ggagcaacgg cgcggcgcgg gcagcgcgca tgqcqqgcq
                                                                     2319
```

```
<210> 5791

<211> 3679

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (341)...(3349)

<223> similar to gi4529889 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5791
gctgtgtata tggccacata taaaaggtct tttaacttta ttaagctttg ttttctcatc
                                                                    60
tgtaaaatgg aaaagggcct gctctgcatg gttgcagaga tgagtgagtg ttagtgtgct
                                                                   120
tgacactctt cctctgagga aatagcaccc gtggttgcca gtttgtggct actggagcct
                                                                   180
cacatggcat ttggaggtgt ggctcactac cccaccccg cctggggctc caggctaacc
                                                                   240
catgcaaaac tgtatgtgct ctctgaccct cagtgtgctc cctctcggcc cacagccccc
                                                                   300
ggtccctgag aagcggcccc ctgaaataca gcatttccgc atgagtgatg atgtccactc
                                                                   360
actgggaaag gtgacctcag atctggccaa aaggaggaag ctaacctcag tagggtggcc
                                                                   420
tgtcggagga gttaggttct gcccggcgtt caggagaagt gaccctgacg aaaggggacc
                                                                   480
ccgggtccct ggaggagtgg gagacggtgg tgggtgatga cttcagtctc tactatqatt
                                                                   540
cctactctgt ggatgagcgc gtggactccg acagcaagtc tgaagttgaa gctctaactg
                                                                   600
660
aggaagagga agaagaagag gaagatgagg agtcagggaa tcagtcagat aggaqtqqtt
                                                                   720
ccagtggccg gcgcaaggcc aagaagaaat ggcgaaaaga cagcccatqg gtgaagccqt
                                                                   780
ctcggaaacg gcgcaagcgg gagcctccgc gggccaagga gccacqaqqa qtqaatqqtq
                                                                   840
tgggctcctc aggccccagt gagtacatgg aggtccctct ggggtccctg gagctgccca
                                                                   900
gcgaggggac cetetecece aaceaegetg gggtgtecaa tgacaeatet tegetggaga
                                                                   960
cagagcgagg gtttgaggag ttgcccctgt gcagctgccg catggaggca cccaagattg
                                                                  1020
accgcatcag cgagagggcg gggcacaagt gcatggccac tgagagtgtg gacggagagc
                                                                  1080
tgtcaggctg caatgccgcc atcctcaagc gggagaccat gaggccatcc agccgtgtgg
                                                                  1140
ccctgatggt gctctgtgag acccaccgcg cccgcatggt caaacaccac tgctgcccqg
                                                                  1200
gctgcggcta cttctgcacg gcgggcacct tcctggagtg ccaccctgac ttccgtgtqq
                                                                  1260
cccaccgctt ccacaaggcc tgtgtgtctc agctgaatgg gatggtcttc tgtcccact
                                                                  1320
gtggggagga tgcttctgaa gctcaagagg tgaccatccc ccggggtgac ggggtgaccc
                                                                  1380
caccggccgg cactgcagct cctgcacccc cacccctgtc ccaggatgtc cccgggagag
                                                                  1440
cagacacttc tcagcccagt gcccggatgc gagggcatgg ggaaccccgg cgcccgccct
                                                                  1500
gcgatcccct ggctgacacc attgacagct cagggccctc cctgaccctg cccaatgggg
                                                                  1560
gctgcctttc agccgtgggg ctgccactgg ggccaggccg ggaggccctg gaaaaggccc
                                                                  1620
tggtcatcca ggagtcagag aggcggaaga agctccgttt ccaccctcgg cagttgtacc
                                                                  1680
```

```
tgtccgtgaa gcagggcgag ctgcagaagg tgatcctgat gctgttggac aacctggacc
                                                                     1740
ccaacttcca gagcgaccag cagagcaagc gcacgcccct gcatgcagcc gcccagaagg
                                                                     1800
gctccgtgga gatctgccat gtgctgctgc aggctggagc caacataaat gcagtggaca
                                                                     1860
aacagcagcg gacgccactg atggaggccg tggtgaacaa ccacctggag gtagcccgtt
                                                                     1920
acatggtgca gcgtggtggc tgtgtctata gcaaggagga ggacggttcc acctgcctcc
                                                                     1980
accacgcage caaaateggg aacttggaga tggtcageet getgetgage acaggacagg
                                                                     2040
tggacgtcaa cgcccaggac agtggggggt ggacgcccat catctgggct gcagagcaca
                                                                    2100
agcacatega ggtgateege atgetaetga egeggggege egaegteace eteaetgaea
                                                                    2160
acgaggagaa catctgcctg cactgggcct ccttcacggg cagcgccgcc atcgccqaag
                                                                     2220
teettetgaa tgegegetgt gaeeteeatg etgteaaeta ceatggggae acceeetge
                                                                     2280
acategeage tegggagage taccatgaet gegtgetgtt attectgtea egtggggeea
                                                                    2340
accetgaget geggaacaaa gagggggaca cagcatggga cetgaeteee gagegeteeg
                                                                    2400
acgtgtggtt tgcgcttcaa ctcaaccgca agctccqact tggggtggga aatcgggcca
                                                                    2460
tccgcacaga gaagatcatc tgccgggacg tggctcgggg ctatgagaac gtgcccattc
                                                                    2520
cctgtgtcaa cggtgtggat ggggagccct gccctgagga ttacaagtac atctcagaga
                                                                    2580
actgcgagac gtccaccatg aacatcgatc gcaacatcac ccacctgcag cactgcacgt
                                                                     2640
gtgtggacga ctgctctagc tccaactgcc tgtgcggcca gctcagcatc cggtgctggt
                                                                    2700
atgacaagga tgggcgattg ctccaggaat ttaacaagat tgagcctccg ctgattttcg
                                                                    2760
agtgtaacca ggcgtgctca tgctggagaa actgcaagaa ccgggtcgta cagagtggca
                                                                    2820
tcaaggtgcg gctacagctc taccgaacag ccaagatggg ctggggggtc cgcqcctqc
                                                                    2880
agaccatccc acaggggacc ttcatctgcg agtatgtcgg ggagctgatc tctgatgctg
                                                                    2940
aggctgatgt gagagaggat gattcttacc tcttcgactt agacaacaag gatggagagg
                                                                    3000
tgtactgcat agatgcccgt tactatggca acatcagccg cttcatcaac cacctgtgtg
                                                                    3060
accccaacat cattcccgtc cgggtcttca tgctgcacca agacctgcga tttccacgca
                                                                    3120
tegeettett eagtteeega gaeateegga etggggagga getagggttt gaetatggeg
                                                                    3180
accgcttctg ggacatcaaa agcaaatatt tcacctgcca atgtggctct gagaagtgca
                                                                    3240
agcactcage egaagecatt geeetggage agageegtet ggeeegeetg gaeecacace
                                                                    3300
etgagetget geecgagete ggeteeetge eeeetgteaa cacatgagaa eggaecacae
                                                                    3360
cctctctccc cagcatggat ggccacagct cagccgcctc ctctgccacc agctgctcgc
                                                                    3420
agcccatgcc tgggggtgct gccatcttct ctccccacca ccctttcaca cattcctgac
                                                                    3480
cagagatece agecaggeee tggaggtetg acageceete ceteceagag etggtteete
                                                                    3540
cctgggaggg caacttcagg gctggccacc ccccgtgttc cccatcctca gttgaagttt
                                                                    3600
gatgaattga agtcgggcct ctatgccaac tggttccttt tgttctcaat aaatgttggg
                                                                    3660
tttggtaata aaaaaaaa
                                                                    3679
```

```
<210> 5792
<211> 4721
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (4442)...(591)
<223> similar to gi5915904 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5792
aaatgcaggt agttttccc ccttttcccc ttaaaaattt tttttttccc taaaagcttt 60
aaactttgga gggagggtgg gccaatttgt ccccccccca aaaaaaaggt tcctttccaa 120
aattcccaag taggtttta ataggcccc cataaagaaa aaaatttttc cttgccatcc 180
```

ccggttaaaa ttgggccccc caagggttct tttaaaaggg cccccctttt tttttttt 240 gcactgaagc agaagttgct ttaatcaagg ggtgaagtcc tcaatcaagg ggacctcact 300 taacctttgg tggtggggtc tcagcctacc ccccacaagc cctgaggccc ctcaggaagg 360 agggagcagt tgaacaacaa attatggcag aggccaggga atgggagtgg gggaacccgg 420 gtcaaggtga aggggcagga cgctgaaagg gtgggagtga agctgaacgg ggcaggaaga 480 gcttaaccca cgtttctacc tgggggctgg ctgaggtggc tgtgcatcgq qcagaqcqqc 540 accagagggc tgagggtcga aggggacagc aggggaaagg agtgcttagg agatgaggcg 600 actgtgaagc tggtgcagct gctcctgggt cagcaccagc cggtgtcgct gtccaaaacc 660 agccgcacat gagaaggtca ctttgcccat gtagactgtg tcatcctgct gctcctcctt 720 ggccctgagg aaggctgatg aagggaaggt ggcaaagtca gtgggtactg tggctccagg 780 gcgctgagat actgtctcct tgaggacctc atccttgagc ttctcgacgg tgtcactcag 840 ggacttaagc tgagccactt gctccataag ttgggccgac gggctcttgg cagcagggct 900 ggtgcgagtg atgtctacta cgtgcgtgtg tgtgctcaat tgattcaatg tctccagcag 960 ctggctggtc ttacgataca gcgctccagc tggtaactca ctgccagggc cctcatggga 1020 tagctttgca acatgcagag ggggcaggga tgccaaggat gccttcatct gggctccctt 1080 gaggatgctg ttctcatgct ggagctggga gatgtgcagc ctcatggcag agatctgctq 1140 aagcagcagt ggtgagtcct tcaccagccc tgggcctggc acagaccctg gagcctgccc 1200 agggatggct cctcgctgct gttcttcacc agcaatgcca gagaccagag tagcaatgcc 1260 tgaaggagga gggccccgga gtccctcaat cgtgcgtttg gactggctgt tcagacqctq 1320 ctttagttct gccttctctg cctccagctg gtcgatgtca gcctggagtg catccattgt 1380 ctcctcaaac tctttctcct tctttcgcag cagtgcctgg gtctcctcca gccgagtctg 1440 gactttctcg atgcgctcat ctgcatcctt ggcagcactg tccaacttct tctccaggag 1500 ggtcagccgc acattggcct cacttagctc ctctccctta atcttgagtg acttcttcaa 1560 ctccttaata actgtctctc gatcttcgag cttcaaaccc aggccttcag catctgtgat 1620 ctctgcacga agggcagcag cccgcagttc aaccgggggg aggcttgctg gggggccgct 1680 ctgcatcata ctccccctcc tgcatggctg tgaccaactt tgttcatggt actgatqaqq 1740 atgttgcatg actggcgcag acactcatag gggctgctgg agggggtccc atagatctgc 1800 tegettgett tgaaagecag tteeteeaga geagecacaa gtageceete attetetgee 1860 agtggggcaa tgagctgggc agcagcagct gccacctcct gcagcacagc cacgacccac 1920 gtcaagtgtt tcctgcagtc taggagcgtg tcagatacct gtggtccaaa ggccagcgca 1980 2040 getgggatee caggageate tgteeetgge attegeette ggatettett geagaactgg cggatgtgca ctgcatgaag tttccagatc ccggagcagg agggcaatat ctgtagcctc 2100 ctgcccaccc tgcaagaagg cacgcagccg tcctacctcc acactcatgc agtccaqagc 2160 2220 actotgcgtg aacttaatgt ggtcagccag ctgcatagta cagtcctcag gctgttcggc aaggtggatg ctgtacagat gctgatagta cttgatggcc ttggtgagag gctccacatt 2280 gacagtetea tecagetgat cettgtgeag eagtteaatg aggaaateea aggagegete 2340 atgggcactc atctcagggt acaggctgcc cactttctta tacacaatcc aacctgcact 2400 gagagagggc atggcatcaa tagcggtggt agcggtggcc tgcagcaggc atcagcgagg 2460 tacaccagtc ctatggctgc aaagctgagt tgctccccag cagctcctcg cagcccaggc 2520 cgctctgaac agttctcact tagttcaaac ttctcctggg cctgcttccg gatcagctct 2580 2640 gccttgcaaa tgagacgagg catgagcaac agcaccagaa cgcagtcatg gtccccacct ggccgaagga agctgtcagg catgaaggct gtcagcaggg acatgtgtcg attggcctgg 2700 gccacctcca tctgcctcaa ttccatctca attgccttgg catgggcctt agtctcagca 2760 aacttgattt tgaagtcaaa ggtctctgga ggtggctgct gttgcctctc cacagatgct 2820 tectgetggt ttgtcagtte eegatteaca teetgtagat gggeggteag etggeggtae 2880 ttcttgatgg tctgctggta gtctgcaacc gtctcctggg ctgcctccac acgcttctgg 2940 geeteacgaa ecegegegee tgeeatgtee agetgeteee geageteeag ttetgtetea 3000 cgtgcattct cctgcagctc atcgttcatc tcattcatcg cttccaagtc tcccacagtc 3060 teceteaact egegeacttt etetteeaga tteaggttee gatetgteag cateteeace 3120 atctcctcag cacccagage ageategace tgeteettga geteateaat ggtgetetet 3180 geetggetta geteeteetg cagaegetee egetgttgee teacaactte cagetettgg 3240 3300 ttcttctttt ccatgagctt ctggagcttt aacatgctcc tgcttctctg aggaagaaag atcccgcatc ctcaccaggg catccttcag gcgggcattc tgctcctcaa gctgcttgag 3360 ctgataactg gatgcagcgc catctgagcc cttctcttca atctcagcct tgaggatctc 3420 taagtcagta gtgagctcgt ccacccgctc cttcagtgcc tccacctcct gctgcaggga 3480 ctcagcccgc tcttcagcca tctccttgtc caaagtggcc atctcaatgg catcagcagt 3540 atcagccatc tectecatat agegtteett tgeeteeage geeteettgg etteettet 3600

```
cgcctccttg aggcgccgct gcaggtcggc ctgctgctcc tgcattttgc tcttccattc
                                                                     3660
ctgcacctgc tccagctgga ttttgtgttt ctccagctct tttagctttg ctttgtcttc
                                                                     3720
tgcccgtttc agtctcaggg tctctagttt ctcctccagg tcccqcacct qagcccttag
                                                                     3780
teceteetee teettggatg gggaaggaag eggggggaet geteeaggag aggtgaggae
                                                                     3840
cggcgtgggg atgatgggtg ctgccagcgg agtctgagcc qqqqtqctqq qctcactqct
                                                                     3900
getcagetca cetgetgacg etgagecaga ggggeccagg gagetactgg ecceaqecae
                                                                     3960
cccagtactg gctgggcgcg tgggcttggg tcgccgagtt gtggtctttc gggctgtcgg
                                                                     4020
tgccttctta ggcttcagtc cccgcagttt gctagtcttt gcagttgtat cagttccctc
                                                                     4080
tcttttgagg acttttgaag cagaagaatc aggtgtctct ggggaagtag tatctgctcc
                                                                     4140
atcttcaaat acctggatct gggactggcg cacaaagatg ccatgccctt catcacaagt
                                                                     4200
gaagtacttc ctgccttgaa cagttccatc atttttgccc tttgcttcat ccagaatcac
                                                                     4260
gcctacccat ttgccagtgg caaacagtgt ggctccaaca taggccacag tgcctcggtg
                                                                     4320
gccttttcca atcacctcta cacgggagcc cacccgcaga ggccgggcgc ttgcctccqc
                                                                     4380
actcatcctg ctgccgctgg gcgtccggct gtacacgtgc ctcttgctct gtgccatgtt
                                                                     4440
getcaccegg cetetaceee etceeceage tggccaaaga cagagagaaa aggtagaaae
                                                                     4500
ctaggcagga gggtcagggc gctgggccct catagaggga cacaggagtc gtcaggcaca
                                                                     4560
gccctcccca gtccatgggc ctcactcggt ggcctacacg ggtaggggtg ggggcagtga
                                                                     4620
tgggggctga ggagcaagtc ccctctgctg cctgaggatt cctgaaccca qagacacaga
                                                                     4680
atcctgcttg ccagctgatg agtctcactc tgcgctagtg c
                                                                     4721
```

```
<400> 5793
ttttttttt ttgactgaac gatttctaaa ctttatggaa aaagccaatg acaatcaatt
                                                                       60
agccaaaaac gagacgccaa atcccatctc actccagcgc catgccctct tctcaaacqc
                                                                      120
tegeeggete taggaeetet ceaceageae agtteteagg agteetgetg gteteecagt
                                                                      180
gctgttctaa gggtccacat gaaggcaggt caggcgggac tccccgggca agcacttctg
                                                                      240
tacgcggaaa gcacgaggcg caggagccat ggagagccgg tcctttggag acaggaatac
                                                                      300
ttaagaggat tggcaaaccg gagaaacgct gggagaggtg ccccqcactq cqqtqqtaaq
                                                                      360
gcagagtete agtteteete gggettgteg getggeggte cacaaggetg aageatettt
                                                                      420
tccatcaagt tgaagcggac tcgcgctttg ctctcattct ccgcaatggc gaagtagttg
                                                                      480
agaaggtcga agtggcccat gtaggagcag tacgagtcgc ggtgttggtt caccagccac
                                                                      540
teccaettgg tggtgtegge gtggeeegtg eegatgtaet tggaetgeag gtgeteeage
                                                                      600
tggctatgga tggtgtagcg gtcagtcatc tcgccgcttt ccccttcgct ctcaggtcag
                                                                      660
aggacgcagg taacaactcg ccgctctagc gttttacagg agagtgaagc caccgcgcgg
                                                                      720
aagctccagg tccgcgccgt cgcagaagaa tggcggaatt ccnccncatg gggtagcgaa
                                                                      780
```

ctcgat 786

```
<210> 5794
     <211> 1070
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (353)...(764)
     <223> similar to gi4406556 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5794
tttcgtctca cttcagccag agagcggggt tagggcttca ttgccttgtg tcctctgctc
                                                                       60
egggagaett eggtgattet gecaeteeet eegtegetet gtgaeetget ggeattgaat
                                                                      120
gatttatage taagaeteea ggacaeeeet gaageegaga aatgaaatee caagttgaee
                                                                      180
gtcaagtcca acgctcgctg cagacatcta gtggacccgg cgctcgcgga cggaagcgga
                                                                      240
cagacctagt tggatcctta tcccaccaat ctgqcccacc tttqctqcca tctaacaccq
                                                                      300
ctgaccggcc caccgttcct ccactgtccg ctggttgacc cgggcagcgg agagaggagg
                                                                      360
gtgttgtcaa tggaaatatg gattcttcta cagcaaacat gtacatctat atcatgtgga
                                                                      420
acaaggatag tgggaaaacc tctgattgtg aggacgtaga actgagaaga gcatatgaaa
                                                                      480
tgtcataaga aaaacacttc tggagcatgt cgtcttcaag aaaatggtgc ccagacagtc
                                                                      540
aggattgtgt tacattttaa taggaatggg gatatttgtg atatactgac aaaccaagac
                                                                      600
aggtgactat aaaactgcaa tgtaaagtgt cagcttcttc tcacaccttt ataqtaqaca
                                                                      660
tctgagaacc tcactcctgt cagcatattc ttgqqqttqa atctcaaqtq atccataqaa
                                                                      720
tcttagataa agcagatgaa aataggcttt tctgtcttcc taagtaaaca gcaatgaagt
                                                                      780
tgagagaaag aagatattgc tggaagtcat gataaagtct atcttctgtg accatatgtt
                                                                      840
tccttagaga gttttagaca ttgaccctca tctaaaaaat tgtgaaaaag gactctcacc
                                                                      900
agtctgttaa tatgtatgta tatgaaagaa attactggta aacttctaag gcaggcattg
                                                                      960
gtgttacttt tttttatctt tattgtgtct gtaaaatgat tgtgtgtatt ttttctttga
                                                                     1020
ttagacaatg agattcccaa ataaatttta ttaaagccaa aaaacccttt
                                                                     1070
```

```
<210> 5795
<211> 1502
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1330)...(1020)
<223> similar to gi4877643 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5795
ggctgtcaat gctgaactta cagtgttaaa gttcatttat ttttctctgt ttgcttttt
                                                                       60
gttgaaaatg tagctgtctt ggggtttggc ccgattttac aaggaaaatt attttctttc
                                                                      120
ttcctttttt attttaaatg agaaaaata aaaaccctca caacgtgaga ttcctttact
                                                                      180
tctgcagcat aaaagcaaat gaaggtaaga aaatctcctg gtacgaaaaa tttgagtaag
                                                                      240
aattctctct agaataaaca aggtccccac agatagctga aggaaagagg aagcagttca
                                                                      300
qtctqqcacc cggtactctt tgggaaaaca aaaagggagg cagattgcat tactgctctc
                                                                      360
ttctcataga aaacggtaag tttttgtggc atggtccatt gtccaagagt gtaagaaaag
                                                                      420
aagtgagttg gccattcaga tagctaaaat gcagtttcat ctgaccaaaa acccaagatt
                                                                      480
atctgcacag tctctgcagt gccaggacaa tgcaggtgag agaccaggag agcagggagt
                                                                      540
ggccacgctg ggctgcagaa gagtccacct ctctccggtc gggatccact gcgggggcct
                                                                      600
ctgtggtgac aaactcaaac tccgtgggac acacgtcatc catgcaccca ctgccactcc
                                                                      660
ctgagccact ggattcatca cttgtgtcct ggaaattgac atcattgcca ttgtaggcgt
                                                                      720
tttttagttt gttggtcatc acacggagag ccataatctg ctgtctgatg aaagtgtcag
                                                                      780
gccgagtgat gtccacatcc cacctcggga ttgttgatct ggttggtgag cccatcattc
                                                                      840
atgateteag geaagtatet ggetttgetg tgeeegttee ageatteete etegttggae
                                                                      900
gtgcccgctg tctagctctc gtccttgcag atagtgtagg gtaatgctga ccagaccttt
                                                                      960
ttagagaget teaatttete ttttatgtet gtgaceagee ggteeaaget tgtgeetgea
                                                                     1020
gcagttgttg gtctttcctc aggattgtag ggcctgaaac gtgtattaaa attttcagga
                                                                     1080
gctgagcggg cagatctgag ggctggagca ggtttgggct gaccacatcc ctgaaagacc
                                                                     1140
tttgcagaca cctgcatgct gttttcttgc atgttcataa tggcttcaga aatcttgaca
                                                                     1200
tctatcgggt ccatgaccga ctcaatgttg aatggcccct ccagtcgctc tgccaccaag
                                                                     1260
agcattgcat ctgttaaaat acaggaacat gatttatttg caaactggga gctccaggtt
                                                                     1320
cccaacctgt gtttaaacat tgttaaaaca actggatgaa aaataatggt gcattcacgt
                                                                     1380
ttttaaattt gctttcatat agtccaaaat gaaatagatg actgaatctt aggacgactg
                                                                     1440
tattttgttt gaagattcaa aattatttta tatgtctaga accagggctg aaaataagaa
                                                                     1500
aa
                                                                     1502
     <210> 5796
     <211> 1143
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (502)...(822)
     <223> similar to gi2318003 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5796
acgtcatatg catcagaata agctgtttta tttttgtatt agtagcgggc taagttatta
                                                                       60
acaatcatac tttcttggat aagaacattt ttaacaagga tatcttctaa agaatgtgta
                                                                      120
ttcgtatagc ataccaatac cttttcacaa ctgtggaatc agaataattt atggcattcc
                                                                      180
cgatagagga ggcagcattg tttttattga ttggaataag gaaaattttg aaggatgtat
                                                                      240
atatagettt tagtteeate teegettget ttatgatteg attatttgtt taettaettt
                                                                      300
catatgggca taacatgaat ttaaatcaag cagatttaaa atttttcaac agttggaacc
                                                                      360
taagctttct gaggtgaaaa atgtttctta aaaggtttgt aggaaagaga tttaacgagt
                                                                      420
cttttcaatc gtttaataaa agtatacact gagcgccttc tacagagttg ggcaggtgct
                                                                      480
gccgagaagc ttagcgctac gccggcctcc aagaccgcac atccgggaca ttcgagagtc
```

```
agtccgaggc cccgccctcc taagggcggg gccactgggc aatcggcgca ggcccttcgt
                                                                      600
cgtgccccgc ctcgtctgcc ccgccagcgc gtcgagggag gggccagcga cacatggcct
                                                                      660
agtaactgtc cggccgcggc gctggcttaa gccatggctg agggtagccg gattcctcag
                                                                      720
gcccgggcgc tectacagea gtgcetgcac geccggetge aaattegeee agecgatggg
                                                                      780
gacgtcgcgg cccagtgggt ggaggtaacg tcagcccggc agctctcgtt atcctccggc
                                                                      840
gtgcggggcg gttttttccg cgttgtctcg gtgactcgtc cgctctgtgt ctccctctga
                                                                      900
gaccggcggt ccggccgcgg ggataccggg tcagcttgaa gctggccgcg gtggcctgcc
                                                                      960
tgqctgcgct tgtcttttcg gtccagcatc accgttcccc agcgccagtt gtagcacccg
                                                                     1020
agaggaagag cgtgtctccc ttcttggggg gaccacaggt ccaaagagga ctggtgatct
                                                                     1080
acgtgtgctt tttcaaggga gctgataaag aacttcttcc caaaatgtgt aatacactgt
                                                                     1140
                                                                     1143
```

```
<210> 5797
<211> 1929
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1364)...(1460)
<223> similar to gi1510153 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5797 cagacagcga ttaggtctat ttcaaggcat tctgccagga gcacagcgac tgggggccca 60 cgtaatgagc ccacatctga gcccacggaa cccagccagg ctggcgagga cctggaaaag 120 gagaccctgc gcaagcagcg gctgcagcag ctatgaggag gacttctacg agctggtgga 180 gccggctgag gtggctgagc ggctggacct ggctgaggca ctggtcgact tcatctacca 240 gtactggaag ctgaagagga aagccaatgc caaccagccg ctgctgaccc ccaagaccga 300 cgaggtggac aacctggccc agcaggagca ggacgtcctc taccgccgcc tgaagctctt 360 cacccatctg cggcaggacc tagagagggt tagaaatctg tgctacatgg tgacaaggcg 420 cgagagaacg aaacacgcca tctgcaaact ccaggagcag atattccacc tgcagatgaa 480 acttattgaa caggatctgt gtcgagagcg gtctgggagg agagcaaagg gcaagaagag 540 tgactcgaag aggaagggct gcgagggctc caagggcagc actgagaaga aagagaaagt 600 gaaggcgggg cctgactcag tcctggggca gctggcaggc ctgtccacct cattccccat 660 cgatggcacc ttcttcaaca gctggctggc acagtcggtg cagatcacag cagagaacat 720 ggccatgagc gagtggccac tgaacaatgg gcaccgcgag gaccctgctc cagggctgct 780 gtcagaggaa ctgctgcagg acgaggagac actgctcagc ttcatgcggg acccctcgct 840 gcgacctggt gaccctgcta ggaaggccgg aggccgcacc cgcctgcctg ccaagaaqaa 900 accaccacca ccaccaccgc aggacgggcc tggttcacgg acgactccag acaaagcccc 960 caagaagacc tggggccagg atgcaggcag tggcaagggg ggtcaagggc cacctaccag 1020 gaagccacca cgtcggacat cttctcactt gccgtccagc cctgcagccg gggactgtcc 1080 catectagee acceetgaaa geeeeeegee actggeeeet gagaeeeegg aegaggeage 1140 ctcagtagct gctgactcag atgtccaagt gcctggccct gcagcaagcc ctaagccttt 1200 gggccggctc cggccacccc gcgagagcaa ggtaacccgg agattgccgg gtgccaggcc 1260 tgatgctggg atgggaccac cttcagctgt ggctgagagg cccaaggtca gcctgcattt 1320 tgacactgag actgatggct acttctctga tggggagatg agcgactcag atgtagaggc 1380 cgaggacggt ggggtgcagc ggggtccccg ggaggcaggg gcagaggagg tggtccgcat 1440 gggcgtactg gcctcctaac tcacccctt ccctgtccca ggccctgccc tggtccccc 1500 acaaggcctc agcccagtca caactgccat ttccagtctc tgctgagtgt cccagaccct 1560

```
<210> 5798
<211> 2711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (956)...(1760)
<223> similar to gi193527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5798 tttcgtgcgg aggtcgcggc gagccgggcc gagcagtgag ggccctagcg gggcccgagc 60 ggggcccggg gcccctaagc cattcctgaa gtcatgggct ggccaggaca tcggtgaccc 120 gccaatccgg tatggacgac tggaagccca gcccctcat caagcccttt ggggctcgga 180 agaagcggag ctggtacctt acctggaagt ataaactgac aaaccagcgg gccctgcgga 240 gattetgtea gacaggggee gtgettttee tgetggtgae tgteattgte aatateaagt 300 tgatcctgga cactcggcga gccatcagtg aagccaatga agacccagag ccagagcaag 360 actatgatga ggccctaggc cgcctggagc ccccacggcg cagaggcagt ggtccccggc 420 gggtcctgga cgtagaggtg tattcaagtc gcagcaaagt atatgtggca gtggatggca 480 ccacggtgct ggaggatgag gcccgggagc agggccgggg catccatgtc attgtcctca 540 accaggccac gggccacgtg atggcaaaac gtgtgtttga cacgtactca cctcatgagg 600 atgaggccat ggtgctattc ctcaacatgg tagcgcccgg ccgagtgctc atctgcactg 660 tcaaggatga gggctccttc cacctcaagg acacagccaa ggctctgctg aggagcctgg 720 gcagccaggc tggccctgcc ctgggctgga gggacacatg ggccttcgtg ggacgaaaag 780 gaggtcctgt cttcggggag aaacattcta aatcacctgc cctctcttcc tggggggacc 840 cagtcctgct gaagacagat gtgccattga gctcagcaga agaggcagag tgccactggg 900 cagacacaga gctgaaccgt cgccgccggc gcttctgcag caaagttgag ggctatggaa 960 gtgtatgcag ctgcaaggac cccacaccca tcgagttcag ccctgaccca ctcccagaca 1020 acaaggtcct caatgtgcct gtggctgtca ttgcagggaa ccgacccaat tacctgtaca 1080 ggatgctgcg ctctctgctt tcagcccagg gggtgtctcc tcagatgata acagttttca 1140 ttgacggcta ctatgaggaa cccatggatg tggtggcact gtttggtctg aggggcatcc 1200 agcatactee cateageate aagaatgeee gegtgtetea geactacaag gecageetea 1260 ctgccacttt caacctgttt ccggaggcca agtttgctgt ggttctggaa gaggacctgg 1320 acattgctgt ggattttttc agtttcctga gccaatccat ccacctactg gaggaggatg 1380 acageetgta etgeatetet geetggaatg accaggggta tgaacacaeg getgaggace 1440 1500 tgtacaagga ggagcttgag cccaagtggc ctacaccgga aaagctctqq qattqqqaca 1560 tgtggatgcg gatgcctgaa caacgccggg gccgagagtg catcatccct gacgtttccc 1620 gatectacea etttggeate gteggeetea acatgaatgg etaettteae gaggeetaet 1680 tcaagaagca caagttcaac acggttccag gtgtccagct caggaatgtg gacagtctga 1740 agaaagaagc ttatgaagtg gaagttcaca ggctgctcag tgaggctgag gttctggacc 1800

```
acagcaagaa cccttgtgaa gactctttcc tgccagacac agagggccac acctacgtgg
                                                                     1860
cctttattcg aatggagaaa gatgatgact tcaccacctg gacccagctt gccaagtgcc
                                                                     1920
tccatatctg ggacctggat gtgcgtggca accatcgggg cctgtggaga ttgtttcqqa
                                                                     1980
agaagaacca cttcctggtg gtgggggtcc cggcttcccc ctactcagtg aagaagccac
                                                                     2040
cctcagtcac cccaattttc ctggagccac ccccaaagga ggagggagcc ccaggagccc
                                                                     2100
cagaacagac atgagacctc ctccaggacc ctgcggggct gggtactgtg tacccccagg
                                                                     2160
ctggctagcc cttccctcca tcctgtagga ttttgtagat gctggtaggg gctggggcta
                                                                     2220
ccttgttttt aacatgagac ttaattacta actccaaggg gagggttccc ctgctccaac
                                                                     2280
accccgttcc tgagttaaaa gtctatttat ttacttcctt gttggagaag ggcaggagag
                                                                     2340
tacctgggaa tcattacgat ccctagcagc tcatcctgcc ctttgaatac cctcactttc
                                                                     2400
caggcctggc tcagaatcta acctatttat tgactgtcct gagggccttg aaaacaggcc
                                                                     2460
gaacctggag ggcctggatt tctttttggg ctggaatgct gccctgaggg tggggctggc
                                                                     2520
tettactcag gaaactgctg tgcccaaccc atggacagge ccagetgggg cccacatget
                                                                     2580
gacacagact cactcagaga cccttagaca ctggaccagg cctcctctca gccttctctt
                                                                     2640
tgtccagatt tccaaagctg gataagttgg tcattgatta aaaaaggaga agccctctgg
                                                                     2700
gaaaaaaaaa a
                                                                     2711
```

```
<210> 5799
     <211> 1760
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1672)...(144)
     <223> similar to gi5777952 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5799
ttttttttt ttgagcggtt ttcttaagtg tctttaatac tccactcagg gcagtcccct
                                                                       60
ccctctactg agaggctctt ggctctggcc ccaagagcag ctggaaggcc ctggcctgaa
                                                                      120
cttcaaccaa cttgaatgtc caaggctgtg tgtgccacgc tccctqqctc tggtacgtgg
                                                                      180
tatgcaagca cctctcgggc cttgggggag tttgatcccc tccagccact cctgggtaca
                                                                      240
gctcctgcac gtgtgcacct ggactccgga cgccgcacag ggatgtcagc gtaaatgcct
                                                                      300
tccattctgc cgcagcaggg gccttatccg catgtccgtc ttgaatcttg ggctttggcc
                                                                      360
tcttgccatt ttaagcatcc tccagcacag gcgaggacct ccacaaagtg gaattgggaa
                                                                      420
atttgccctt cttaagcttt aggatcatgt tctggatgtt tcgaaagcca taggctgcag
                                                                      480
caaagcgtaa caccacctct ccgttcttct caagggtgac ctcttggaag tctttqtttc
                                                                      540
tragggeteg gtaagtgace tectecacat eccteegttg aacageteet tggeegeatg
                                                                      600
tctgaagatg tgtgccaggt gcccgtctga gctggctcca tcatgacgcg tcactttgtc
                                                                      660
ctccttcaag tctccaaaca gagtgtcgac ggcaqcatct ctcactgaga gqtcaccctt
                                                                      720
gctcccatta atttgaagca aatttcaacc ttgatgttaa acaacgcaag tcaagcgccc
                                                                      780
ccgggaagcc atgcaaagcc agggggaagg gctttccctg aagagcctcc cagcttcttg
                                                                      840
tcattaacca aggggccacc aatgaccgtg gaaaaatctt ctctggagac aaggttctgc
                                                                      900
tgtctggcgg aaataatcct tcaccaaaga gcccatgacc tgctgggggg actttggcgg
                                                                      960
```

1080

1140

1200

1260

tgccaagaag gtgggccagt gatggggcga ccccagcaac ccgctccqqc qtatcqqacc

ccagcccagg acaggcagag gtcagcatgg ggcagggtgc gttccctccc tcactgtgct

ggcgaataac gacgcacgaa ttcttttttg actctcccag gatactaaaa tccqcaqcta

tcgtcgtatc aaatacatag tgcaccccaa gacttttgag gaaaccacag agtcttctgg

atgcatcagt tacactgagg ttgaatttag cagcaaaata aggcaaagat tgaggacaca

```
cagacactaa cccagctttg tgctttgagg tatcacattt cttgttaagg ttcagaacgc
                                                                     1320
ggaagaagtc cttggcattt tgctgggaaa gttggactcc ttcctctgca gtcatacagc
                                                                     1380
tgtcacatgc caggcagtcg ctcaaaaata tcttggcatc agccaacttg tggaattctc
                                                                     1440
cettetgtag teccagetae tagggagget gaggeaggag aateaettga geeteagagg
                                                                     1500
tcaaggctgc ggtgagccat acagtgagcc actgcactcc agcctgggtg acagtgagac
                                                                     1560
cctctccatt ttcctgggct ggactcggtg catcggctga cacattctct tggtcatcag
                                                                     1620
tttttgtttt cttactacat tccttgcgcg tgcagtgctc acacttcatc tggagcgcgg
                                                                     1680
egggegggag geegggegee teageeteag ggaageaeeg ggagaetggg acaceaetge
                                                                     1740
ccgccgcccg cggccctttg
                                                                     1760
```

```
<210> 5800
<211> 2194
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (75)...(1280)
<223> similar to gi5442036 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5800 tttcgtctcc cctcccttcc ccggccccgg ctctggcccc ggcccattcg ctgttgggtc 60 ttctgctagg gaggatgtcg ggttcgtcgc tgcccagcgc cctqqccctc tcqctqttqc 120 tggtctctgg ctccctcctc ccagggccag gcgccgctca gaacgctggg tttgtcaagt 180 cgcccatgtc agaaactaag ctcacggggg acgcctttga gctgtactgt gacgtggtcg 240 ggagccccac gccagagatc cagtggtggt acgcagaagt caaccgggca gagtctttca 300 gacagctgtg ggacggtgct cggaagcgcc gtgtcaccgt aaacaccgcc tacgggtcaa 360 acggcgtgag tgtgctgaga ataacccggc tcaccttgga ggactctggg acttacgagt 420 gcagggccag caacgacccc aagaggaatg acttgaggca aaacccctcc ataacatgga 480 ttcgagccca ggccaccata agcgtccttc agaagccaag gattgtcacc agtgaagagg 540 teattatteg agacageest gtteteestg teaceetgea gtgtaacete aceteeagge 600 tctcacaccc ttacatacag ctactggaca aaagaatggg ggtggaactg aagtgcaact 660 cgtaagaatg ccagcaacat ggaagtacag gatcaaataa gccgagagct gaggattcag 720 gcgaatacca ctgcgtatta ttcactttgt taagcggctc ctaaagcaaa cgccaccatt 780 qaagtgaaag ccgctcctga catcactggc cataaacgga gtgagaacaa gaatgaaggg 840 caggatgcca ctatgtattg caagtcagtt ggctaccccc acccagactg gatatggcgc 900 aagaaggaga acgggatgcc catggacatt gtcaatacct ttgqccqctt cttcatcatc 960 aacaaggaaa attacactga gttgaacatt gtgaacctgc agatcacgga agaccctggc 1020 gagtatgaat gtaatgccac caacgccatt ggctccgcct ctgttgtcac tgtcctcagg 1080 gtgcggagcc acctggccc actctggcct ttcttgggaa ttctggctga aattatcatc 1140 cttgtggtga tcattgttgt gtatgagaag aggaagaggc cagatgaggt tcctqacgat 1200 gatgaaccag ctggaccaat gaaaaccaac tctaccaaca atcacaaaga taaaaacttg 1260 cgccagagaa acacaaatta agtactgctt acaatatctt taggttcctg aaactggtgg 1320 caacatgacc tgctaaaatt ttctgcttgg acctctttgg ttctctcccc tttcaagtga 1380 gcaacaccac aatgactgtc taaagcatgc cttatttagc ctctcctgta agggtgatct 1440 agccaggtac attttaaaca atgcttcagt gtagaaggtg taaactattt tgggcttgat 1500 gtgctgtgaa tgttgctttt ttttttcctt tgttaaaata tttaaataaa agtgaaaagg 1560 teetetgagg ateaaateat geatgegeea ttttttaett aatgeagetg ttaaattgge 1620 aaagctctaa aatgcactgc tgccatctag ggatacactt ttgtaaagta cagcaaaacc 1680

```
tacagatata tacagtatat aaatatatat atatatat ttatattttt gggggtggga
                                                                     1740
gaaatccaaa ataaagtaaa tgcttgtttc atttttaagc tgctgatatt cattccttat
                                                                    1800
tgtatgttgt cagatgagga aattgtgcag ttctggtaca taaagatgag taatataaac
                                                                    1860
tgaaatctat aattttaagg gcttaacctg tgactttaat aagctggaac agtccactga
                                                                    1920
atgggtataa tgaattgcag tatatacgta tgattgcttt ttaaqtgatt atcttttctt
                                                                    1980
ctgttaagtc atgtaaattc ataaatcctt ttgcactgat gtgttgaacc ttattcttgt
                                                                    2040
acattcattc aatcaaggca aacttttata atttttcttt tgtttccaat gaccttgaaa
                                                                    2100
tgttatagca tggtaatatt ctatgcaact atagttatac tttttqqttt qacactqtat
                                                                    2160
tttttcacat tgatttactg gttgatgata gatt
                                                                    2194
```

```
<210> 5801
    <211> 694
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (60)...(6)
    <223> similar to gill74092 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5801
cattaatttc tgtctttatg ccaatgtcac actgtcttga gtacttcctt tgtaataggt
                                                                   60
tttgaaacca ggaattgtgt gacttctaca atttcattct tctttatcaa gcatgttttg
                                                                  120
gctgttttgg gtcctttgaa attacatatg aatttcatca gcttgtcagc ttgtcagctt
                                                                  180
240
tctccagatg aatttgggga atgtctccat attaacaata tttagtcttc ctatccttga
                                                                  300
acatgggata tattttcatt tatctggctt cagttctttc aacaacattt tgtagttttc
                                                                  360
actgtacaat gatctggtct tttgctttcc aaaaccaqaa actcttttaa gttgaaggtt
                                                                  420
tcttaagact tttggggagg cagttctgct aaacaaacag aaaagagaac atttggttag
                                                                  480
aaaaaaacag agataacagg aagattaatt attttaataa taaagcaagg aaccaattta
                                                                  540
ttaaaaatttt ttagaatatg ctttgtaacc ataatgcttg aatctgttat acatttgtct
                                                                  600
cagactggaa gttccccttt gtgacttcaa gatacttgag aaacaatcag taatcaagta
                                                                  660
atgggttgct gggtatagac aaacaacaca gagg
                                                                  694
```

```
<210> 5802
<211> 1372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (896)...(1280)
<223> similar to gi2992628 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5802
gggccgcctg gacacacagg tcccctggca caggtaacaa cagaggaccc tcagggagag
                                                                       60
aaggeteeca getteeteta caccetgaga accqetqeeq aqaqaeceaa aaqaeaeetq
                                                                      120
ggcatcagtg ctgcagccct accttggcct ccaggtagat gctagtggag ggcgccgcc
                                                                      180
tggcgacaaa ggaagaggca ggcagcaaga gacagcgcgc agatgacgaa cagggagtcg
                                                                      240
ctcaccagga cgcggacaag cagcagggcc cagggctgtg ccqccqcqcc qcatqqqaqa
                                                                      300
gcacagcaca cagcacgttc accagcagaa agagcagcga ggcccccaca aaggcccctc
                                                                      360
ggacagcgag caagcctcgg ctcatcttcg ggcccgacgc ttcactttgg ccttgaacac
                                                                      420
cacctggggc aaagtagagg ttcataaggc gtcaaggtga agaactgcag gcagacgggg
                                                                      480
cagcagtaga gaagccagaa gggcaaaggg ccccagggtt gtttggcgcg gggagtatct
                                                                      540
tcggaaatta gaaggagaaa aaggttgtta cgcaaggggg ccccagaagc agacagaggg
                                                                      600
ccaggaacac ccgtctgata agctgagacg cttgtgcccc atacagaagc accagccaga
                                                                      660
gctgggcata gacggagaag aagagcaggg catacagggt ggtgtaggca gctgtcagcc
                                                                      720
ccagggtcac agcaggtggc agcgcaggca ccaagcccgg caagcaggca accaggccca
                                                                      780
gacaggttac tetecatgte aagggaggga ggeetgaate eeggagacag acaaggaggg
                                                                      840
actgtcggcg ggaccaggga aataaatacg gaggggtggg aattgcaggg tgcagagag
                                                                      900
gagatggggc gctcaggagg aaagaagttg tggctgacag gccccctcc tcaacaqaga
                                                                      960
gaccettgee ettggggaae acaggeagee tgggeeceag geeetteaet caqqqqeatq
                                                                     1020
gaagggcagt ctcttttctc caggacagac cggatagggg ttggqqqtqt ctcctccctq
                                                                     1080
ggcctacccc agagccaagg atggggggat gcagaggccc aaggagagga ctccctqqcc
                                                                     1140
teggtegtte atgtegteet gggtggaggg ggaggetete teteeteeaa taatgeggat
                                                                     1200
ggggagggcc tctgcctcct gtcctcgtaa ttctcgaaag ctgcccccgc cccacctcc
                                                                     1260
eccacegegt ceaegeteca geeteaaggg gagggaggag geggaegeea qqteeteaqq
                                                                     1320
ccgctgatgg gagagccggc tcaggtcgtg gggacccggg gctccgacga aa
                                                                     1372
    <210> 5803
     <211> 1345
     <212> DNA
     <213> Homo sapiens
    <220>
     <221> misc feature
     <222> (1322)...(238)
     <223> similar to gi184848 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5803
tttttttttt ttcacaggtg caaagattca ctttttattt attcattctc ctccaacatt
                                                                       60
tagcataatt aaagccaagg gactaggagg ggggtgaggt gaaagatgag ctggaggacc
                                                                      120
cgcaataggg gtaggtcccc ctgtggaaaa aggttcaaaa ggcccaaagg atgggaaggg
                                                                      180
ggtcagcgct ggaactagag gagcaggtgg gggcaacttc ctccccctcc taaaaactct
                                                                      240
ccccctgttg aaacctcttt gtgaacgggc cgaacctcag gcccctgaat gggtgaactt
                                                                      300
ccgcaggccg taagagtttg tgtttcctcc gtaggtctqc tttqctcagc gtcaggqqtq
                                                                      360
ctgcttgagg gctggtaggg tgctgttcct tgtctagtcc tgctctgttg acactctttc
                                                                      420
ctgggggagt ttacccccat ttggaagggc gttaatccac ccttccactg gtactttttg
                                                                      480
gcctcttttt ggggatagag gttattcagc agggcacaca acagaggcag ttccagattt
                                                                      540
```

caactgctca tcagatggcg ggaagatgaa gacagatggt gcagccacag ttcgtttgat

```
ctccaccttg gtcccctggc caaaagtgta caggtgaatc agcatactgc tgacagtaat
                                                                      660
aaactgcaaa atcttcaggc tccagtctgc tgatggtgag agtgaagtct gtcccagacc
                                                                      720
cactgccact gaacctgtct gggatgccag tggccctgct ggatgcatca tagatgagga
                                                                      780
qcctqqqagc ctggccaggt ttctgttggt accaggctaa gtacttccta ctaatagtct
                                                                      840
gactggccct gcaggagagg gtggctcttt cccctggaga caaagacagg gtggctggag
                                                                      900
actgagtcaa cacaatttct ccggtggtat gtttgatctc cagcttggtc cctccgccaa
                                                                      960
aagtgtacgg gggaggccag ttggtacgct qctqacagta ataaactgca aaatcttcag
                                                                    1020
gctctaggct gctgatggtg agagtgaagt ctgtcccaga cccactqcca ctgaacctqt
                                                                    1080
ctgggatgcc agtggccctg ttggatgcat catagatgag gagcctggga gcctggccag
                                                                    1140
gtttctgctg gtaccaggct aagtagctgc tgctaacact ctgactgqcc ctgcaggaga
                                                                    1200
gggtggctct ttcccctgga gacaaagaca gggtggctgg agactgtgtc aacacaattt
                                                                    1260
ctccgggggt atctgggagc cagagtagca ggaggaagag aagctgagct ggggcttcca
                                                                    1320
tggttccctc tgggtcctaa ctgag
                                                                    1345
```

```
<210> 5804
    <211> 1233
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (795)...(1062)
    <223> similar to gi529138 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5804
aggggttttt ttccaaggca attaatttgg gtaaccccag ggtttttcca ttcccgcggt
                                                                   60
tttaaaacgc gggcccggga atttaattta ggggccccat taaaaaaatt tttcctttqc
                                                                  120
aacccggggg agttaaattt ggttctttta aaagggcgcc ccttttttt tttttttt
                                                                  180
tgatggttaa aaaaatttgg gttttattgt ttttgctaaa taatactaaa aaaaaaattt
                                                                  240
300
ggaaggggaa agagatcatg gccaaaaaaa tagtagttaa cccccaccc accccaaag
                                                                  360
ctctagccag tcatgtgagc atcacccaca tcccactcag tgcctgatat tcggatggtg
                                                                  420
gcatactctg ccccaggaga ctgcctgaag gcacggggca atgggtgcca attttagctc
                                                                  480
tcagcaggtt agtcaaccag acaaactggt gggctaaagt ccagaaattc tttccaggtt
                                                                  540
ttctgctcat tggctgagca catacaaact gtcataagcc tgtaaaattt aaggggagtt
                                                                  600
ggggtggggc gtaagagcaa aaggacagca ggagaagaga aattacgggt cacccaagtt
                                                                  660
tttcctgggc tagtggctct ggatatagat ttaaagagag gtcagagtaa atggactcca
                                                                  720
ggtttcttat caaagaaaac tatccctcaa tgaggagctg agatgtgcca tgcaagagag
                                                                  780
ttcttcctgc agaggcacag gagaaagggc agctgactct ctcatgtgga gagagtggcg
                                                                  840
aggaaggtct tctagtacca tgaagtaaga caggcagagg gagaatcctg aggtttgggc
                                                                  900
```

1020

1080

1140 1200

1233

caaatgtgag actggtacac acacagttaa agactaaaaa gccatcagga accctcaaag

ccaaattcta tctgcacact ggctctacaa agttcgcagc aagaatctct tgcaccaagt

caagttagtg gcctggctat gatggatggt ggggagggca atacattttt attttcagag

ggatgaggtg ggaagaacag ccatgatcta gtaaaaagag acctgcaaga agcagaaaat

atttagagaa cattttaata tatattttca tatatatatt taaaqttaaq aaaaataaaa

ctaattcaag ccatgccctg tgcaaaaaa aaa

```
<210> 5805
<211> 2173
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1848)...(676)
<223> similar to gi3907579 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5805 gctgttgcat cggctgtcat gaattcggca cgagctcatg ctgccagatt atctgggtgt 60 ggtggcacta gaatggagat acttcatggg aataatactc attgttcttg accccactgg 120 gtcagtgctg accetaceae cacceaetet geageageae ecagatgeta geettgtaca 180 gaaagcccca gcatctcttt acagtcaatg agctctctct ttattgaggt atttcaaata 240 tacaaacact tcagagcttt ttagatatgt gaaggtccaa tttagtgaag cggattaaca 300 aaacatgatt ctaaaagcct gcctcctcta gaccaaggcc atgtaaaaga tttatgtacc 360 aatcagcatc ttttcctttt aataatcttc aggatgttgt gttgggtccc cagattccca 420 tttgattttc ttgcatcatt ttctcagact gtttgcttcc ttgcttcctc cccagtgagt 480 gccttgggca ttttgtgtgt gcagatagag aagtacagag ttactgcagg agccctcagg 540 agtgagacaa caggaaatga caaagtaata cagagctgca gtagctggga tgggtgagga 600 ccccacttgg gatgccccat ggtagagtac tggtgccttg ggagggtaga actgctcagg 660 tctagcacgc ctcactgaag attggattca cctgctgggt gactcggatg aaggtagttc 720 tcctgctcaa ctctttgagc ttagctgctc ccacataggt acacgtagag cggatccctc 780 ctaggatgtc tcggatggta tgttccacat ctcctttaaa aggaacttcc actgtctttc 840 cctctgaggc tctgtactca gccacgcccc cagcatactt cttacatggc caatttaaga 900 actcattcca tagaagagct tgtacttctt gccatccctc tcgatgagct caccacctga 960 ctcactgtgc ccagccagca tgccacccag catcacgaag tcagctcctg ccccaaaagc 1020 cttqqccaca tccccaggac agctgcaacc tccatctgaa atgatgtggc ctttgaggcc 1080 atgagcagca tctgcacact ccatcactgc gctgagctgt ggatacccca ctccagtttt 1140 cttccgagta gtacacacag agcctggccc aattcccact ttgatgatgt cagccccaga 1200 aaggatgage tettetacea teteteetgt taccacatte cetgecatga tggtgtgetg 1260 ggggaagcgc ttccgtacat cttttacaaa ttcaacaaag tgttcagagt agccatttgc 1320 cacatccagg catatatact tcacctgggg aatagcttcc aggatctgtt ccagctgctc 1380 aaaqtcagaa gagcctgtgc ctgagctggc agccagatgc tcaagacagt caggattctg 1440 gccagcaaac tcttgccact gaacgaggct atagtgctta tggacagcag tgaagagag 1500 gaacttctca gcaacaagta tagaggcagg taatagtact gacaggagca gcatcttcca 1560 tttcaaagtg aacaacttgt atataagaaa aacacatccc atttggggca catcccagaa 1620 actcccagga acctaggact tacagagaac cttggccatc tcaaaggtgc ccacagtatc 1680 catattggca gcaatgatgg gaaccccaga gtatgtctgc tttgagttcc gaaatgaaaa 1740 ggatcttgtg agatccacct cacttcgaga cttaagggta ctgcgtttgg gcctcaaaag 1800 gacatccttg aagtccagtt tcacatcgtt gtcaatatga ggcatggcgc ttagcctcgg 1860 ggtagcgatg aatctgaggg ctggaaggca ggaagtcata aggaccaatc ttcccctggg 1920 ctttaacgcc ctgttacggc tggtggcctc tcttcgctta agttgtggaa ggtcgggcaa 1980 aggccgaagt gtggtccctg aagcctgtca cctcgaccca tcccgtggct gcgattaccc 2040 tagggctcca tcccaggtac tgtttgttgg ggaggagagc tgggaaaggg ttgtgagaga 2100 ecctgaeggt geatteetta eccegetaea etteettett etaeceetge aaagageaat 2160 ggggcaagag gct 2173

```
<210> 5806
<211> 1849
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1462)...(349)
<223> similar to gi3387962 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5806
ttttttttt taaagataaa attaatttat ttgacttcac aacttcattg ggccacacag
                                                                       60
gggcccacaa gtcctagaag cacaaccttg tggaagtggg ctggggaggc cagttctctg
                                                                      120
gactgcctgc tcccttgtcc agagctgcct tgagccaggt ccctcctgac cccatcatcc
                                                                      180
tgttcccata tgcaagggct gctcaggtcc acctgcaata aacccaggcc tgcctctggc
                                                                      240
agcagaggac agggcctcgt gggtggcagc agcactggtc ctcgtggctg tgggtgtggg
                                                                      300
tgggtgggta ggtaggtggg aaggagggca ggcaggaggg tgtggttcag tgcagagagc
                                                                      360
tgctgttctg ctcttcaaag gccatcttgc ccagaagctg gctgtccaac tccacccac
                                                                      420
ttacaggcag ctggaagaag ttcatttcag ctgctaaggc tgccatggca gaagggtcct
                                                                      480
ggccaaactg agctcgcaac atcatgtcca ttttctccag cctcctcttg agccgcttgg
                                                                      540
cctctcgctc tcggatgagc cgggcctgcc gcttttccgg ggtttcaatg gcccgcttca
                                                                      600
qcctcatqqc ctcccgatcc cgctgcagcc ggcgtgcccg ctgctcgtct gtctcctgca
                                                                      660
tgcgctgcaa gcgcttggct tcacggtccc tcatgcgcct cacctcccgc tcctcggggg
                                                                      720
tctcattgtc ccgccggctc ttcttggccg tgcgctctcg ttccagccgc tgcagccgta
                                                                      780
cttccaaagg ctcattctgt cgacgtagag cccacttgcg tacactggga gtctgggctt
                                                                      840
ccagcagttt acggtaggca gcacagttgt tgcacacaag cagaattcca gcagggtaca
                                                                      900
ctggaggact aaaggcaata tccttcccct cagcactgga gggaccctca ttgtggactg
                                                                      960
tgggtaggga ttccatattt agtacttcag gaagtttctc actgttaaaa gtggcatggc
                                                                     1020
tggtgaaccg ggctccacac acagcacagt tagatcgctg gtcctccgag tggattaaga
                                                                     1080
ggtggcgacc caatgacccc ggggagctaa gggcccggcc acagacagga mcacatgtag
                                                                     1140
ctcttggcgc tcaccactgc tgcagtgtgc tggtacacgt gagcaatcaa ctgctcccgg
                                                                     1200
ctcccgcagt ctagctggca gaggggacac tggcagagtt caagcaaggg qtcagaattc
                                                                     1260
aaattccctg tgacctcgtg ctcttaccct tcgttcccac caacaggctg ttctgtattt
                                                                     1320
tetaactett tetecaattt ggacaaceee teecatette eetetgaagt gtggggaaaa
                                                                     1380
agattcatct tgtgtcgtct ccctccttca tcaccctcaa ctgtcacagt gaaactttta
                                                                     1440
tttggatttg tctgtttccc gaacgggaca tgtttccctg atgcaagagc tctggtcttt
                                                                     1500
ccccagtttc acgactggat atgttactac ctccttgcaa gatgctaacc tccagctctg
                                                                     1560
gtgcagttcc cacggagcaa agcaaactcg actgaatcca agtgatctgt atctgccaaa
                                                                     1620
aaggagagga caagaaagct ggtcacttag ccgcctggct gttcacctga cccctggggt
                                                                     1680
tgggtctggg gcgtgtctaa tcagccgaga tggtccctct gcttcttcaa gcatgagccc
                                                                     1740
aggtaaattc ccaggaatta ccaagacaag agcctgacaa agagccggag gtcttccgag
                                                                     1800
gcggctcaga caaaccctta gacaacacaa tctccgaaat ctaaattta
                                                                     1849
```

```
<210> 5807
<211> 1278
<212> DNA
<213> Homo sapiens
```

```
<220>
     <221> misc feature
     <222> (219)...(889)
     <223> similar to gi2384956 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5807
ggcgcctgac ggaagcggcg gcagcgggca gcggctctcg ggctgcaggc tgggcagggt
                                                                       60
cccctcccac gctcctgccg ctgtctccca cgtcccccag gtgcgcggcc accatggcgt
                                                                      120
ccagcgacga ggacggcacc aacggcggcg cctcggaggc cggcgaggac cgggaggctc
                                                                      180
ccggcaagcg gaggcgctg gggttcttgg ccaccgcctg gctcaccttc tacqacatcq
                                                                      240
ccatgaccgc ggggtggttg gttctagcta ttgccatggt acgtttttat atggaaaaag
                                                                      300
gaacacacag aggtttatat aaaagtattc agaagacact taaatttttc cagacatttg
                                                                      360
ccttgcttga gatagttcac tgtttaattg gaattgtacc tacttctgtg attgtgactg
                                                                      420
gggtccaagt gagttcaaga atctttatgg tgtggctcat tactcacagt ataaaaccaa
                                                                      480
tccagaatga agagagtgtg gtgctttttc tggtcgcgtg gactgtgaca gagatcactc
                                                                      540
gctattcctt ctacacattc agccttcttg accacttgcc atacttcatt aaatgggcca
                                                                      600
gatataattt ttttatcatc ttatatcctg ttggagttgc tggtgaactt cttacaatat
                                                                      660
acgctgcctt gccgcatgtg aagaaaacag gaatgttttc aataaqactt cctaacaaat
                                                                      720
acaatgtctc ttttgactac tattattttc ttcttataac catggcatca tatatacctt
                                                                      780
tgtttccaca actctatttt catatgttac gtcaaagaag aaaggtgctt catggagagg
                                                                      840
tgattgtaga aaaggatgat taaatgatct ctgcaaacaa ggtgcttttt ccagaataac
                                                                      900
caagattacc tgagtccaag ttttaataac aagaataaac aactttgtga aatatcatgg
                                                                      960
attgtatggt ttcttaaaat ataacttgag acacgtggta tttgccagta tttgtgttcc
                                                                     1020
tcttgtgcca gatctatttt ttacaagaac tgtgcaaata tcagtaactt ttgggtaggt
                                                                     1080
attgattatt aggaaaataa ttaggtgtat tatctggggg aaaaaaaaac ttttgctaag
                                                                     1140
ttttttttga aacatgctca aagcttttta aatcaatatt tagaaattag tttaacgatt
                                                                     1200
tactattata cctgctagtg atatttatgt gatatctata aatgaaaata aatgcaaaat
                                                                     1260
tataccaaaa aaaaaaaa
                                                                     1278
     <210> 5808
     <211> 826
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (440)...(743)
     <223> similar to gi3041844 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5808
tttcgggccc ggaaagattt aagtttcgtg aatgcatacg caagactcgg aggtagttcc
                                                                       60
ggttccggcg tggccacttt cgttggtggt gttcagttgt ggcggttgct ggtcagtaac
                                                                      120
agccaagatg ctgcggaatc tgctggtgag gagcttctca tcttgcatcc atgatggggg
                                                                      180
```

cgagggagtg gagaggaggc tgaggcacca cgacagaaaa ccctcacctg ggaggggtgc

```
cqaaqqcggc taatgaagtc accttgattc gtgtcctttt tccctgacct tactttccct
                                                                      300
tecgtetatt cetetegeee caggeegtta etgggtagat gtaaggagtg gagaggeagg
                                                                      360
ggaagtgacc agagactcgt gggttagacc cgtcttgggt tcttagtcac cacctctaac
                                                                      420
cctgtcggtc attgatgagg ctcttcgtca gattgggcag aggacgataa gcactgcttc
                                                                      480
ccgcaggcat tttaaaaata aagttccgga gaagcaaaaa ctgttccaqq aqqatqatqa
                                                                      540
aattccactg tatctaaagg gtggggtagc tgatgccctc ctgtatagag ccaccatgat
                                                                      600
tcttacagtt ggtggaacag catatgccat atatgagctg gctqtqqctt catttcccaa
                                                                      660
qaaqcaqqaq tgacttcagt catcccagca atcgcttggt tcagtttcat tcagctctct
                                                                      720
atggaccagt aatctgataa ataaccgagc tcttctttqq qqatcaatat ttattgactt
                                                                      780
gtagtaactg ccaccaataa agcagtcttt accatgaaaa aaaaaa
                                                                      826
```

```
<210> 5809
<211> 2568
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (317)...(2182)
<223> similar to gi4680645 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5809 ggcacgaggc gccctgcaga ttgtctcttg ttgcgtaagt ttttttgacc gtcactcgtg 60 teagetteaa agteagatag attittetee eageatgite taetteegag getgitgeeg 120 ttgggtcgcg gtttccttca ccaagcagca atttccgttg gcacggttga gcagtgacag 180 egeggegeee eggaeteege acttegaegt gatagteatt ggtggaggae atgeegggae 240 tgaggcagcc accgccgccg ctcggtgcgg ctctcggact ctgctcctca ctcaccgcgt 300 ggacacgatc ggtcagatgt catgtaatcc ttcctttggt ggcatcggaa agggacattt 360 aatgagggaa gtagatgcct tggatggcct gtgttctcgc atctgtgacc agtctggtgt 420 acattataaa gtattaaacc ggcgtaaggg accagctgtg tggggtctga gagctcagat 480 tgataggaaa ctctataaac agaacatgca gaaagaaatc ttgaatacac cactgcttac 540 tgttcaggag ggagctgtag aagatcttat tcttacagaa ccagagcctg aacacactgg 600 gaaatgccgt gtcagtgggg ttgttttggt ggatggaagc acagtatatg cagagagtgt 660 720 agcaggacgt ttaggggatc agccttctat aggattggct cagacactgg agaagttagg 780 gtttgtggtg ggaaggttga agactgggac tccaccccga attgccaaag aqtccattaa 840 tttcagtatt ctaaacaagc atataccgga caatccatcc ataccattca gctttaccaa 900 tgagacagta tggattaagc cagaagatca gctgccatgt tacttgactc acaccaaccc 960 tagagtggat gagattgtcc ttaagaacct tcaacttaat agtcatgtta aagaaacgac 1020 aagaggacct cgatactgac cctccattga atcaaaagtt ttgcgttttc caaaccgtct 1080 acatcaggtt tggttggaac ctgaaggaat ggattctgac cttatctacc cacaggggtt 1140 atctatgacg ctaccagctg agttacaaga gaaaatgatc acatgcatca gaggcttgga 1200 gaaagctaaa gtgattcagc caggctacgg tgttcagtat gattacttag atccccqtca 1260 gatcacccct tccttggaga ctcatttggt tcaacgactc ttctttgctg gacagatcaa 1320 tggcaccact ggttatgagg aagctgcagc tcaatgctct tgtagggtgt gatagccgga 1380 atcaacgcca gtcttcgggt cagtcgcaag cctccctttg tggttagccg aacagaaggt 1440 tacataggag tettgattga tgaceteaet aetetgggea eeagtgaaee atacegeatg 1500 tttaccagcc gagtagagtt ccgtttgtca ctgcgccctg ataatgctga cagccggctc 1560 acactgcgag ggtataaaga cgctggctgt gtgtcccaac aacgatatga aagagcttgt 1620

```
tggatgaagt cttctttaaa agaaggcatt tctgtgttga aatctattga gtttttgagc
                                                                     1680
tctaaatgga aaaaattaat cccagaggct tctataagta ctagtagaag tctgcctgtc
                                                                     1740
agageteteg atgttetgaa gtatgaggaa gttgacatgg atteattage caaggetgtt
                                                                     1800
ccagagccct tgaagaagta tactaaatgt aaagagctgg ctgaaagact gaaaatagaa
                                                                     1860
gccacttatg aatcagtgtt gttccatcaa ctacaaqaaa taaaqqqaqt tcaqcaaqat
                                                                     1920
gaagetetee aactgeeaaa agaeetagat tatttgaeta teagggatgt gtetttgtee
                                                                     1980
catgaagttc gagagaaact acattttagt cqtccacaga cqatcqqqqc tqctaqtcqc
                                                                     2040
atacceggag taacacetge egecateate aatetgetga gatttgtgaa gaccacteaa
                                                                     2100
cgaagacagt cggctatgaa tgaatcatcc aagactgatc aatacttatg tgatgcagac
                                                                     2160
agacttcaag agagagagtt atagctttca attcataaaa gattttttaa agagccatat
                                                                     2220
aaataatttg gatcaatacc aacagtatag ataaaagaat tatttagcac atgttaaaat
                                                                     2280
agcctttatt aggttaccta tgggtttgcc cattaatttc ctgagtggga cagaaattat
                                                                     2340
aattgtgctt tttcgtgtat atgaaaaaac tagtcgtaaa caatttgtac tctttcttta
                                                                     2400
aggagctgta atacaaataa ctttgtgcag tgttcatcaa agagagagac agtgaaccta
                                                                     2460
aaactgaacc tggaataaaa ctcaacatgc agatttgcct actcataqqq actttqccta
                                                                     2520
ttaagtctac caaattaaaa gtcttatcat tcagaaaaaa aaaaaaaa
                                                                     2568
```

```
<210> 5810
     <211> 1409
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (261)...(1103)
    <223> similar to gi556868 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5810
eccaegegte egggttggtg ettectgtte geagetgegg caacagegte ttgeeetgte
                                                                       60
gccacgctgg agtccactgc aacctccgca teetgggtte aagcaattet eetgeeteag
                                                                      120
cctcccaagt agctgggact acgggagaag atggtataaa ctggtccatc agtgacaaag
                                                                      180
acattgaggc ccagatagct aataaccgaa cacctggaag atggacccag cggtactatt
                                                                      240
cagccaacaa aaacattatc tgtagaaatt gtgacaaacg tggtcattta tcaaaaaact
                                                                      300
gccccttacc acgaaaagtt cgtcgctgct tcctgtgctc caggagagga catctcctqt
                                                                      360
attcctgtcc agccccctt tgcgaatact gtcctgtgcc taagatgttg gaccactcat
                                                                      420
gtcttttcag acattcctgg gataaacagt gtgaccgatg tcatatgcta ggccactata
                                                                      480
cagatgcttg cacagaaatc tggaggcagt atcacctaac gaccaaacct ggaccaccca
                                                                      540
aaaagccgaa gaccccttca agaccatcag ccttagcata ttgctatcac tgcgcgcaaa
                                                                      600
aaggccatta tggacacgaa tgtccagaaa gagaagtgta tgacccgtct ccagtatctc
                                                                      660
cattcatctg ctactatgat gacaaatatg aaattcagga gagagaaaag agactaaaac
                                                                      720
aaaaaataaa agtactcaag aaaaatgggg ttatcccaga gccatccaag ctaccttata
                                                                      780
taaaagcagc aaatgagaac ccccaccatg atataaggaa gggccgtgcc tcatggaaaa
                                                                      840
gcaacaggtg gcctcaagaa aataaagaaa cacaaaaaga aatgaagaac aagaatagaa
                                                                      900
actgggagaa gcacaggaag gctgacagac atcgtgaagt ggatgaggat tttcccaqqg
                                                                      960
gccccaaaac ctactcttct cctggcagtt ttaaaaccca gaagccttct aagccctttc
                                                                     1020
accepticate acattaceae acepteaagag aagacaagte teecaaggaa ggcaagaggg
                                                                     1080
gcaagcagaa gaaaaaggag aqqtqctqqq aaqatqatqa caatqataac ttatttctta
                                                                     1140
ttaagcagag aaaaaaaag tcttaagccg tcaggcagcc tctgatgtgg cttttcattg
                                                                     1200
ttcatttggc ctttgtgtct ataaccttct ggcactgtgt ttattatcta tgattaaata
                                                                     1260
```

```
aagtgagttt ttggttttgt ttttttaatt tcagccattc ctagagttac tgaatatcca 1320 tggagatctc aattctctgt gtccaacagg atattaggta agaaagtaca aagataaacc 1380 tggacttctc ctattccaat atgtcatct 1409
```

```
<210> 5811
<211> 1612
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1613)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1173)...(521)
<223> similar to gi4128015 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5811 ccttttttt ttttttacct aataaaaatc tttattttt tattaaaaaa gagggcgtt 60 tggtagctat ttaaataaga gggggggggg aatgaatgtc cagatacgag cacctgcatc 120 ttttagtcaa ttgtcagtgg agtcagtggg gtgctaagtg ttctgaactg aagtaggtgc 180 actaaggttc caagcttccc tgcaaggatc tggacgggag gaaaagcaga ggcccctqaa 240 gggaaaaaag ccttgcttcc caatacttat ttttttatta ctgtgcaaaa gagcacactc 300 tecetetttg tgtetetece acceaacgge acceececa ceeccaacce aagagggact 360 tatacatggg agtgcagggg acagagttga ccaggggggg cctttgtccg qcaccctqqc 420 ccacaggetg agetcageee caggeeettt caggeateta gacaeteeca taageetgte 480 agggtggggg gcaagggaga tcccaggggn cacacatact tccctggaag agttggactt 540 aggggtaaga gegggggge aeggtaeeca geettgetet eatteeeagg gaeagggaae 600 aggagagcag tgcacctccc aggggatgga ctaggggcag acccttgccc agcccaatta 660 aagatgggca ggggcaaact catacttaaa tgttggtagg gattcaaagg gttataaaaa 720 gtctgtgaca atctgatggc ccataccagg agcaagctac caaagcggca aagacctgcc 780 acgatgaaaa attatgcctc cacccatggc tatacgggcc tttctttcac tttgtcgtct 840 tececcacag egeggtgeae tteatgeeee ategtggeea caaacatgge caggaageee 900 agcaccaggg agaccaccat tagggctcga gtgqcctgca agqqccqcqq acagqqcqaq 960 caccgagtcg tacattttgc agetcatcat ccccgtgctc tgcgtgacgc agtccatcca 1020 cageceettg tacatggeet gggeegtgat gatgttgtea eeegeatagg ageteatetg 1080 ccactgcggg atggcggtgc aggccaccag acccacccag cccagcaggg ccatggagaa 1140 gcccagcaac tgcaggcccg aattggccat ttccgccctc agaaaacact gggggcgccg 1200 ggcggggaga ccctacagta aaacaaacga cacttggggg gcagccccac aaaagaaaac 1260 ttgaggtgga gttttccggt cacccaaaga gacaaaaagg gtttgggcca ggtgaatgca 1320 aatcttgtca ccaaactaca cacaaatcga cccctccagt gaagcgatgg cctcgcgqca 1380 cagggagtag gatacgccgg gagggtggtt ccagacaaaa ttggtggtcc ccgaaggcca 1440 1500 ggcggttccc tccgggcgct ctcggcgacc ctaggcaaac aaaaggtgga ggggccgtct gggcgcgttt ctgagcgccg gcaagtccca aagtatcctg ggctgtaggt ccgaggctgc 1560 ggtgcgcagc agaggtgctc gcccggtccg gcgcgtgggc gacggaatcg gc 1612

```
<210> 5812
     <211> 3881
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(3882)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (3807)...(195)
     <223> similar to gi36122 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5812
tttttttttt ttactatcta caaaaattta ttatatattt acagaagaaa agcatgcata
atcattaaac aaataaaata ctttttatca caacacagta catatttgtc atttttaaaa
agccacacaa tagaaacaag acaccaagat atttaaatta tcttcgttga ctcccccng
taaaaatagc taaacactca tcattcgcgg tgcaattact cataggacat aagttcctgg
aaacaatagt ttggcatgcg taagggcatt cgcacccaaa ggaaatctgg ggttttattg
cgggcagccc ctggcatttc atatggtatg gggtcccggg tgttgggcca atcgccatta
attccacaaa ggattggcaa agcatggaac ctggatatgg ggttctggat ggcctccaaa
ccaatcettt teceettaaa aactgggget ggeteeatgg gggeaatetg gacaateteg
ttcccatttc ttcaaaaacg caggccacca ttcgggagaa ctaccctcca tggggctggt
ctattgaggg attggaatag gtccccctta gcacgaagag tgaaccttat ccatcccacc
atatgcttca aacgctggta ataagtgggg cccaataaaa aatcgggatg ggatttttcc
gaccagtgaa acccattgta cagggacctc catttccctc ctgaaqagga tagcccataa
                                                                     720
tccaggataa aaagattagg aaaccttcct gccacgttaa acagcatcca ttaaaatgga
gtggcatcca cccaatttca ccccttgtta agcccgatac ccttcccctt gaaggcattc
aattaagtga cccaatagtc atacggagag gggatgggca tggggattga tgatgatatc
agggggtgat accttcacag gtgaaaggca tatcctcttg tctatactga ataccacaag
                                                                     960
taccettttg accatgtcga ctagcaaatt tgtctccaat ctgtggaatc ctaacagagc
                                                                     1020
gtacccttat tttacaaaat ttatatcctt cctgattgag agttacccat aacctgatga
                                                                     1080
acaatgcccg tctcgctagt tctgagaaaa gtgctacagt ctcttcttgg tatagcggtc
                                                                     1140
tattggtgct ctcccaaatt catcttcatt ttccaggcaa ggtgactgtt ttgcctataa
                                                                     1200
taacatcatc tcctgatacc acgaaccccc tgggagctat caaaaccnat catcatccag
```

120

180

240

300

360

420

480

540

600

660

780

840

900

1260

1320

1380

1440

1500

cttgtcgtaa atggcatgcg cgtcntgccc tggcatggtt cacgtgtagg cttctcaaaa

acttettett gateaaatee tittitagae teetgitett tgiatgageg atagaaaaea

gacctgaaga agccgcggtc ctacagctga acgattcatg ataacagagt cttccctgat

tatatcccag tgtatgatgc aatggccaca attgagttga tgcctgctgg cagctctcta

```
ttccttaggg tgttcataag ttgttcggga tctttatgta ttccaaccca gcagccatta
                                                                     2100
acaaaaatct tggttgcatc agcaatagct gcaggagaaa tttcttctaa attttccata
                                                                     2160
ctccattctt ctaaaaattc cagaattgga gatggttgag atccaactga aatatacgcc
                                                                     2220
atcaaggcta aattetteac aagteetaca geatggeeet etggggtete ggeaggaeac
                                                                     2280
accattcccc acaacgtatt atgcaactgt cttggttttg ctagcttgcc gtctctacca
                                                                     2340
ataggagaat ttaaacgacg caggtgagaa agagtagacg caaaagtcag gcggtttaac
                                                                     2400
acctgagata ctccagctct ggcttgatga gctttctttt gatcacccca gtttccagta
                                                                     2460
gctaaagagt attttaggcc atcagatatg atccgtgttt taattgccaa ctccaagtta
                                                                     2520
aaatcctttc ctcgatcaat aaatttctgt gcatagatcc gcacttcttt aagcaaattc
                                                                     2580
ttaaacatac ctctaaataa gaatgcaagc agcggcccag caagatccaa tctcttgttt
                                                                     2640
ccatagtgat ctctgtcatc tagttctctt ctacccaaag ctgccagaag taacctatga
                                                                     2700
accatgtatc ccaagaaata ggcttttttg gtctcacaaa aatcactgac accaacatga
                                                                     2760
gggagcattt ctttttgtaa aacttccttt gcatatttaa ttctttctc tttagtaaca
                                                                     2820
ccaggetttg etectettga accaatgaaa tttagtgeaa eattetgtte ttggatgaea
                                                                     2880
aaagcttcat cgagagaagg tttaaccatt tccatcatct ctggatcttc aaaatcataa
                                                                     2940
ataatatgtt ctaaaatatc tctgtcggac acaaaaccta atgctctgaa cacaataatg
                                                                     3000
atgggaactt cttgcttgat atatggtaga gttgccacaa tgcgctgacc aatagcactc
                                                                     3060
ttcttggcac cctgtcctcc tcttgccagc atgctaaccc atatagtact ggtgggtcgg
                                                                     3120
gaagaattct caagacatga tctacactct cctgtgtagg catatttaga atcctttttg
                                                                     3180
gcaaacacat aaactgtgtt tgttgccatt ttctcttggg caatcagaac cttttctgat
                                                                     3240
ccattaataa tgaaatagcc accaggatcc aaagggcatt catttaactc acaaagatca
                                                                     3300
cgatctgtca agccattcaa aaggcagtaa gttgaccgca acataattgg aatttttcct
                                                                     3360
ataaaagttt tctgatgctg agtctgaagt tgttcttcac cttctttaat gactgttttt
                                                                     3420
gttatatcaa cataaagcgg agcagaatac gtgagattcc ttaatctagc ttcattqqqc
                                                                     3480
atcattggtg aaggagcacc atctctttcc caatgggtag gcttggaaag ataaatttgt
                                                                     3540
tcaaacttca gcaaatatcg tggcggttct tcaacttctc cactagcatg ctgagcttca
                                                                     3600
gcctgtaggt ctataggagg agcgtcttcc acaattcttt gaacagacat ctgaataaac
                                                                     3660
tcatcaaaag aatccagctg ttgtctaacc aagcctttct cgtcaaaata ggaactgatt
                                                                     3720
acaatccagc atgettettg ccacaaatcc ggggtgattt catcatcatc ctcatcatat
                                                                     3780
tgcatatect cateegegte gtacatattg ccaaaeggtt etegagetee taactettga
                                                                     3840
aatcaaaaga caaaaaccgc ccagaagcca gcagcgccag g
                                                                     3881
```

```
<210> 5813
<211> 1678
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (305)...(1190)
<223> similar to gi4929603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5813
tccagcgccc cgcaccgggg ccgttagtca gcagaacgcg agctcttgtg gaggagcagg 60
gccggcgca ggcgagactc gggagcgtga gcggggccc tgggggcgcg ccgtccttct 120
tcgccccggc gccgggggct agtagccatg gtccccgctc ctctgtcggg ccagtctgca 180
ggcggagaa gtcggacggc gcccggagcg cggatctcgc cttgtggagg acagcgcgtc 240
ggctgcggtt ctctctcgac cccttctgcc cggcgcttcg gcccgggccg ctcaggtgca 300
gagcatgaat aatctttcat ttagtgagct atgttgcctc ttctgctgtc caccttgtcc 360
```

```
agggaagatt gcttcaaaat tagcgttttt gccacctgat ccaacttaca cactgatgtg
                                                                      420
tgatgaaagc ggaagccgtt ggactttaca tctgtctgaa cgagcagact ggcagtattc
                                                                      480
ttctagagaa aaagatgcta ttgagtgttt catgactaga accagtaaag gcaacagaat
                                                                      540
tgcttgtatg tttgtacgtt gttcacccaa tgcgaaatac actttactct tctcacatgg
                                                                      600
aaatgctgta tgatcttgga caaatgagca gcttttacat aggactagga tcacggatta
                                                                      660
attgtaatat attctcatat gattattctg gatatggtgc cagttccggg aaacccacag
                                                                      720
agaagaacct ctatgcagac attgaagctg cttggcttgc tcttaggaca agatatggca
                                                                      780
ttcgccctga aaaagtggat taaatatggc caaagtatag qqqcaqtacc cqtctqtqqa
                                                                      840
tcttgctgct cgatatgaga gtgctggcgg taattcttca atcccctctg acttcgggaa
                                                                      900
tgcgagttgc ctttcctgga taccaaggaa gacctactgt cttgcatgca ttcccaaaca
                                                                      960
ttggacaaaa tctcttaagg ataacctctt ccagttattt aattaatttc atggggactt
                                                                     1020
gaaggatgaa gtcctttgga ctttttcaca tgggcctcgc atttgtttgg aacgttggcc
                                                                     1080
caaagacctg tggagcctct ctgggttgaa ggagcaggtc acaatgatgt ggaactttat
                                                                     1140
ggacagtatc ttgaaaggtt gaaacagttt gtgtcacagg aactggtaaa tttgtaaaat
                                                                     1200
attctgtaaa tttgctactg ggttttcctt tcttgctgaa ctgcactctt tggtaaataa
                                                                     1260
cataaaacct gaaggttttg tttgcaaatc atgtcagttg ccttcataaa tgtacaggta
                                                                     1320
atgatttgtt aacagactta atgaaggttt taattaccag aactaaaaac tggaaataac
                                                                     1380
agtaccgtgc agtcaggctg tgtaatttat attttttctg tgaatttttt tttaacatca
                                                                     1440
agatgagtac tgtatgagat tttgattcta taaaatcaaa tgctgtaaaa gtattgccaa
                                                                     1500
atgettttge atactagaga cagatttata aatatttttg agacatetea atatattaga
                                                                     1560
tcttatcctg gaatacaact gtgcatattt tgagagaagc tatgtatctg caggcacttt
                                                                     1620
cagtactcat aatggaatga actctaaaag cagatttgac accatgcgag ttcactag
                                                                     1678
    <210> 5814
```

```
<210> 5814
<211> 2007
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (416)...(1792)
<223> similar to gi3327974 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5814
tgaattccgg ggatgggatc cggctcctcc agctaccggc ccaaggccat ctacctggac
                                                                       60
atcgatggac gcattcagaa ggtaatcttc agcaagtact gcaactccag cgacatcatg
                                                                      120
gacctgttct gcatcgccac cggcctgcct cggaacacga ccatctccct qctgaccacc
                                                                      180
gacgacgcca tggtctccat cgaccccacc atgcccgcga attcagaacg cactccgtac
                                                                      240
aaagtgagac ctgtggccat caagcaactc tccgctggtg tcgaggacaa gagaaccaca
                                                                      300
agccgtggcc agtctgctga gagaccactg agggacagac gggttgtggg cctggagcag
                                                                      360
ccccggaggg aaggagcatt tgaaagtgga caggtagagc ccaggcccag agagccccag
                                                                      420
ggctgctacc aggaaggcca gcgcatccct ccagagagag aagaattaat ccagagcgtg
                                                                      480
ctggcgcagg ttgcagagca gttctcaaga gcattcaaaa tcaatgaact gaaagctgaa
                                                                      540
gttgcaaatc acttggctgt cctagagaaa cgcgtggaat tggaaggact aaaagtggtg
                                                                      600
gagattgaga aatgcaagag tgacattaag aagatgaggg aggagctggc ggccagaagc
                                                                      660
agcaggacca actgcccctg taagtacagt tttttggata accacaagaa gttgactcct
                                                                      720
cgacgcgatg ttcccactta ccccaagtac ctgctctctc cagagaccat cgaggccctg
                                                                      780
cggaagccga cctttgacgt ctggctttgg gagcccaatg agatgctgag ctgcctggag
                                                                      840
cacatgtacc acgacctcgg gctggtcagg gacttcagca tcaaccctqt caccctcagg
                                                                      900
```

```
aggtggctgt tctgtgtcca cgacaactac agaaacaacc ccttccacaa cttccggcac
                                                                      960
tgcttctgcg tggcccagat gatgtacagc atggtctggc tctgcagtct ccaggagaag
                                                                     1020
ttctcacaaa cggatatcct gatcctaatg acagcggcca tctgccacga tctggaccat
                                                                     1080
cccggctaca acaacacgta ccagatcaat gcccgcacag agttggcggt ccgctacaat
                                                                     1140
gacateteae egetggagaa ceaecaetge geegtggeet tecagateet egeegageet
                                                                     1200
gagtgcaaca tettetecaa cateceacet gatgggttea ageagateeg acagggaatg
                                                                    1260
atcacattaa tcttggccac tgacatggca agacatgcag aaattatgga ttctttcaaa
                                                                    1320
qaqaaaatgg agaattttga ctacagcaac gaggagcaca tgaccctgct gaagatgatt
                                                                    1380
ttgataaaat gctgtgatat ctctaacgag gtccgtccaa tggaagtcgc agagccttgg
                                                                    1440
gtggactgtt tattagagga atattttatg cagagcgacc gtgagaagtc agaaggcctt
                                                                    1500
cccgtggccc cgttcatgga ccgagacaaa gtgaccaagg ccacagccca gattgggttc
                                                                    1560
atcaagtttg tcctgatccc aatgtttgaa acagtgacca agctcttccc catggttgag
                                                                    1620
gagatcatgc tgcagccact ttgggaatcc cgagatcgct acgaggagct gaagcggata
                                                                    1680
gatgacgcca tgaaagagtt acagaagaag actgacagct tgacgtctgg ggccaccgag
                                                                    1740
aagtccagag agagaagcag agatgtgaaa aacagtgaag gagactgtgc ctgaggaaag
                                                                    1800
cggggggggt ggctgcagtt ctggacgggc tggccgaqct qcqcqqqatc cttqtqcaqq
                                                                    1860
gaagagctgc cctgggcacc tggcaccaca agaccatgtt ttctaagaac cattttgttc
                                                                    1920
actgatacaa aaaaaaaaa aggaattcat qatqctqtac aqaattttat ttttaaactg
                                                                    1980
tcttttaaat aatatattct tatacgg
                                                                    2007
```

```
<210> 5815
<211> 443
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (364)...(10)
<223> similar to gi1712 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

```
<400> 5815
agggtatgag ttttgtactt ctttcataag tttattccta atcatgttat tatttttgat
                                                                       60
agtattgtaa atgaaattat cttaatttca tatttggatt gttcattcca agtatataga
                                                                      120
aatacaactg attittgtat attgatcttg tactctgcaa cctgctgaac ttatttgttc
                                                                      180
caatagtatt ttaatgaatt ccttaggatt ttctacatag aaaatcgtat catctgtaca
                                                                      240
tagagatagt tttccttctt ccttcctaat ttagataact attattattg tcatcgagat
                                                                      300
cttgcttaat tgccctgact agaacctctg gtacaatgtt gaatagaagt agcaagaatg
                                                                      360
gatacettgt ettgtteetg gtettagggg aaaageatet agtettteae cattaataat
                                                                      420
gttgtcagct ttggttttct ata
                                                                      443
```

```
<210> 5816
<211> 2756
<212> DNA
<213> Homo sapiens
```

```
<220>
<221> misc_feature
<222> (1464)...(2694)
<223> similar to gi1262433 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5816 ttcatattaa aaaaatagct ggtaaatctt tctaggtagt aacttatcca aacaatactt 60 tgagtatcat attttgtgaa tgacttgctt aaactgggaa actgaatatt ctttttaaat 120 catataattc ctgtattaaa tgtgaaacac acagtctcca aagtcacctg attctctgtg 180 gaaaatgaaa ggcattgaag gaaaccagat acattaatac ttagttttgg ttgaaagtgc 240 aacattactg tacttagaag gggcttggtt tatttttaga tatttaagct atcattaatt 300 ttagaccaat ggctaataat aagagagatt tttggttgct catttatgga gagacaaaga 360 acagcatggc ataaacaaac atcccagaaa taaatgaaaa gttttaagtg ataaaattgt 420 gttttctatg aaccagtgtt gtacatgaac caacattgtg tttcttagct ctgacctgta 480 cagtgaggta cctgtcagga cccctagtct tggcactgga aatgacaaag ttctcctatt 540 actaaattct catgccttcc cttttctgac ttaagtagat tgaaattggt aggtaccaaa 600 tgatttatgt ttgataaact taagttctgc tgatatcctg ttactggtaa ttctggtacc 660 aaaatttcaa acggtttgat tattagtagc attttgagta cctaggtgca tataatacag 720 ttagcagacc cttacagagt caaaagagat tttggaatct ggtgatactg ttgtttatta 780 cactagccta ttacattttc tttctttata ataactgttt atgtgagttt cattgaaaat 840 cgtggctcta ttgctttatt catggtttcc acaactcttt ttgtaacacc ttaattttct 900 ctcttaggta ttttcctgtt aaataagata tcaaaagcat caatcacaag acagagaaaa 960 cgtattagga aaaacttgta ttagtatatt ctaaactgaa atggaaaaac tcattattca 1020 tattttaata aataaaactc ccaaatgatc ttgctaaatt atcccactat ttagaagtag 1080 aaaataagag aagagtgctt tcaaggaaat ttgtcatatt ctcccttcta tctagaagtt 1140 gacaatgaat tgcaataaaa ctaagaaata actgaatgct gaaaaatacc atgaattaat 1200 gttatggctt ctttattttt gtatatccat tcccacaaaa ttgaatttaa gattattaat 1260 gaaaattcta tattaagtaa taatgcttgt attagtaatg ggcaaagaag tctttctttg 1320 ttacattaac cgttagtaaa agatgtactt tgacatttct gatgtaaaac ctatatgtaa 1380 atattgtaat ttaaatatga ttggacagct gttaagtttt ggggagggaa gcagatgcca 1440 gcgttctctg ctgaaaagac aagatggcgc ttgacggacc acagcagatg gagctggagg 1500 aggaaaaggc aggcagtgga ctctgccagt attatctgtc caagattgaa gaactccagg 1560 gtcaactgca atataaattg gatgggggaa agccacaagg aacagttctg aactccaggt 1620 gcatttgcag ctgattttga atgataagac ccaaaacctc tggaggcggc aggtgcacgg 1680 gaatgaacta aatgttaaag tgtgcctatt acaggaggag ctacagctgc tgcaggaata 1740 ggactcctgt gtcagggaag tagtccaggc catgggtaag aagaaagtgt tggtcaaggt 1800 gcatctcaag gacaagtttg tcatagatgt ggacaaaaat atcagcatca gtgatgtgac 1860 acccagttcc ttggtggttc taagaaatga cagctacact ttgcacaaga tcctacccaa 1920 caaggtggac tcattggtgt cactgatgat ggtgaagaaa gtaccagatt cagcttatga 1980 aatgattggt agactggata ggcagatcaa gaagatcaaa gaagtgatcg acctgcctgc 2040 taagcatccc gagctcttca aagcactggg cattgcacag cccaagggaa tgctgcttgg 2100 aagagactgt tggcctgggc tctggctcat catagggact gtgtaccttt attcatgtct 2160 ctggctctga attggtacag aaattcattg gggaatttct gtgatggcag agaaaatgct 2220 catctgtcat cttcatggat gaaattgact cttttggctc ctcagagctg gagggggatg 2280 ctggagggaa cagtgaagtg cagcagatga tgcttcgagg gtggctttga ggccaccaag 2340 agtatcacgg tttatcacgg ctgctaatac gattgatatc ctggactcgg cactgctttg 2400 cccagggcac attgacagaa aaattgaatt cccaacctgc aatgagtagg cctggctggt 2460 cactttgaag attcattctc agaaatgaac ctgacccagg ggatcaacct gagaaaaatt 2520 gctgagctta tgccaggagc atcaggctga agtgaagggc atgtqcacag aaaccggcat 2580 gtatgccctg agtagcgagt ccatgtcact cagaaggact ttgaggtagt ccaaagtcct 2640 atctcatgcc aaaggacagt gaggaaaaac atgtccatca agaaactatg gaattgaggg 2700 cacateettt gtgtgtatee etacaataaa aeteagtggg acaageaaaa aaaaaa 2756

```
<210> 5817
<211> 2356
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (393)...(1989)
<223> similar to gi4928697 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5817 tttaccggct cgacgatttc gtcccaggca ccgcaccggg cagtctccgg atctgccgtt 60 ctgccccggc ccggaaaacc cggcgccttc caggcccttc gaaagatgga ttctgttgac 120 gtatctggcg gccctggcga gcctggtgga aagttgggtt ttgccagatt gcgccgggct 180 cctctttgtg acgcgcggcc agccccgcat ctcccccgga gccggatggc catgaaatca 240 catctcagca catgcctttg actctggatt gcacatgtat tcattagctg aagcccaatt 300 ttaaaatcca atcaactcta tgattccttg aaatgactgc aaatcaagtc acatccagtg 360 ctcctcaggc caagtggcat cagagctgag tgatggacga cctgcagtcc cagaacctct 420 ccatggacat gactgactcc cctcctgcct tggctaataa cagactggag aatggcatgg 480 ctcagctgat caccaccgag gcctggaaca tcaactccac tgacctggta aagaaggccc 540 tggtgaccgt gccagcccca tccattctga acccccctgc cgagtctcag agtggcatgg 600 ctctgaaggt ggcggccact gtgttgcagc ccctgtgcct cggggagagc ccagtggtga 660 tgcccattca catgcaggtg gagggaagct ccgcaccaga gctcaatccg aatggcaatg 720 ccacctacgt catgaccacc cagggccccg tgcaactgcc cgtggtgctg gagcagcacg 780 tettteagea ceteaactee cetetggtee tgeegeagga ggeeceatge teeteeagta 840 ccatccacaa caacctcttc cagggagcgg aggaccccga ggcccagccc cagctcctgg 900 960 acctgaggat ccccagccag ccgcaggagc ccactttgcc atttgaagct gtgctccaga atttgtttcc ctcccagggc actctcgggc ccccaccctg tcagcctcct cctggctatg 1020 eccetytyce eccaeageet tttageteec cettyteece cetygteeca ecagecaece 1080 tettggtgee gtateetgta ategteeeet tgeetgtgee agteeetatt eecateeeea 1140 tcccggtgcc tcagagttct gaatccaagt tcagctccag tttccccaag ccaccatctt 1200 cetteggeet geacceettt aaaggeacce agacceetet ggaaaaagat gaactgaage 1260 cctttgacat cctccagcct aaggagtact tccaqctcag ccqccacacg qtcattaaqa 1320 tgggaagtga gaacgaggcc ctggatctct ccatgaagtc agtgccctgg ctcaaggctg 1380 gtgaagtcag tcccccaatc ttccaggaag atgcagccct agacctgtca gtggcagccc 1440 aceggaaate egageeteee eetgagaeae tgtatgaeag tggtgeatea gtggaeaget 1500 caggtcacac agtgatggag aaacttccca gtggcatgga aatttctttt gcccctgcca 1560 cgtcccatga ggccccagcc atgatggata gtcacatcag cagcagtgat gctgctaccg 1620 agatgeteag ecageceaae caceceageg gegaagteaa ggetgaaaat aacattgaga 1680 1740 tggtgggcga gtcccaggcg gccaaggtca ttgtctctgt cgaagatgct gtgcctacca tattctgtgg caagatcaaa ggcctctcag gggtgtccac caaaaacttc tccttcaaaa 1800 gagaagactc cgtgcttcag ggctatgaca tcaacagcca aggggaagag tccatgggaa 1860 atgcagagcc ccttagggaa accccatcaa aaaccggagc ataaaggtta aaggaaagtg 1920 aactcccagg aaataccaca tgctcccaat caaaaaacaa cggctggcca ccttttttcc 1980 aagaaagtaa ataacggctt tttaaaattt gtatgattat aatatgggga aaggtgcatt 2040 ggttttataa aaaggcattt aaaacaaatt atctttgtta attattttgg ggagtagttg 2100 ggaaatggaa aggtgaattg gctctagagg ccctgtatqc tagtatcatt ttctttttta 2160 atttttgact tttcacaaat gagtaaataa gagcaaccta tttttcaagc agattgcaca 2220 ttttttgcag ctttaatgga atattgggtg aattagaggg gtaaaaaagc tattttcatt 2280

```
<210> 5818
<211> 1928
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1393)...(1106)
<223> similar to gi4455160 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5818
geggeegee ggeeteeegg gegggeetae ageeatgtee egggaeeegg ggtegggegg
                                                                       60
ctgggaggag gccccgcgcg cagctgccgc gctctgcacc ctgtaccacg aggccggaca
                                                                      120
gcggctgcgc cgcctgcagg accagctcgc tgcccgcgac gccctcatcg ctcgcctccg
                                                                      180
egecegeetg geegegetgg agggggaege egegeegtee etagtggaeg egetgetgga
                                                                      240
gcaggttgcg cgcttccggg agcagctgcg aaggcaggag ggcggcgccg ccgaggccca
                                                                      300
gatgcgccag gaaaattgag aggctgactg agcgactaga agaaaaagag agggagatgc
                                                                      360
agcagctgct gagccagccc caacacgagc gagagaagga agtcgtcctg ctacggagga
                                                                      420
gcatggcaga aggggagcgc gcccgggccg ccagtgacgt cctgtgccgc tccttggcca
                                                                      480
acgagaccca tcagctgcgg aggacgctga ccgccaccgc ccacatgtgt cagcatctgg
                                                                      540
ccaagtgtct ggatgaacga cagcatgcac aaaggaatgt gggggagaga agtcctgacc
                                                                      600
agtcggaaca cacagatggg cacacctctg tccagagtgt tattgagaag ttgcaggaag
                                                                      660
aaaatcgact gttaaaacag aaggtgactc acgttgaaga cctcaatgcc aagtggcagc
                                                                      720
gctacaacgc cagcagggac gaatacgtga gggggctcca tgcgcagctc aqqqqqctqc
                                                                      780
agatccccca cgagcccgag ctgatgagga aggagatctc ccggctcaac agacagttgg
                                                                      840
aagagaaaat aaatgactgt gccgaagtga agcaggagct ggcggcctcc aggacggccc
                                                                      900
gggatgctgc gttggagcgg gtgcagatgc tggaacagca gattctcgct tacaaggatg
                                                                      960
acttcatgtc agaaagggcc gatcgggaac gggctcaaag taggattcaa gaactggagg
                                                                     1020
aaaaggtcgc ctctttgctg caccaggtgt cctggagaca ggattctcga gagccagacg
                                                                     1080
ccggccggat tcacgctggg agcaaaactg ccaagtattt ggccgccgac gcattagagc
                                                                     1140
ttatggtgcc tggtggctgg aggcctggga ctgggtccca gcagccagaa ccccctgcag
                                                                    1200
agggcgggca tcctggcgcg gcccagagag gccaggggga ccttcagtgc cctcactgcc
                                                                     1260
tgcagtgctt cagtgacgag caaggggaag agctcctcag gcatgtggcc gagtgctgcc
                                                                     1320
agtgaccgag actcacccgt gcccttgcgg cctcctggcc cggtgcagct gccctcaggg
                                                                    1380
acagggtggg tgctctcaga tgccatgggt tgagctctac tgagagccaa ggcccctaga
                                                                    1440
atagttgcgg ggcactctga tcgttcactt tggtcccttt ggctatggaa caggctgggt
                                                                    1500
cacagggaac tgccagtgag gctggaggct ggaggtggag atggggtcag gaacatctgg
                                                                    1560
cagagggagg tcccagtctg tgtctccatc aggcttaagc cagagctatc tggtgctggt
                                                                    1620
gtgccagccc ctcccccagc ctgcctagaa aggggtggct gcctgaggga gtcacttgta
                                                                    1680
tggtccccag ggtgggagcc ccatcctgtt ctatggaata aagcgtcgcc tctctgcctc
                                                                    1740
gaaccagtca aatggagtat tgcggctgca cgtcacacta gggtggccac ccccgccatt
                                                                    1800
gcgagccaca tgtctgcact gagaaactgc atttcagtag catttgtcat ccagccggaa
                                                                    1860
gttaaagcac acttacttta ttcacctatt tttataataa acgttcttgc tgctgtgaaa
                                                                    1920
aaaaaaaa
                                                                    1928
```

```
<210> 5819
     <211> 465
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(466)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (77)...(436)
     <223> similar to gi3170965 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5819
nttgttgacg tccctagtcc agngcggtgg aattcatccc tcccctacag aagcccccag
                                                                       60
agggcagcac ctcaccatgg actgcacctg gaggatecte ttettqqtqq cagcaqctac
                                                                      120
aggcacccac gcccaggtcc agttgttaca gtctgggtct gaggtgaaga agcctggggc
                                                                      180
ctcagtgatg gtctcctgct acgtttccgg atacaccctc actaaattat ccatgcactg
                                                                      240
ggtgcgacag gctcctggaa aagggcttga gtaaatggga ccttttgatc ttcaagatgt
                                                                      300
tgaaacaatc tatccccaga agttccaggg cagagtcagc atgaccgagg agacatctac
                                                                      360
agagacaacc caacctacct ggagttgagc agcctgagat ctgaggacac ggccgtgcat
                                                                      420
cactgtgcaa cagacacagt gtgaaatccc ccagcctgag agcgt
                                                                      465
     <210> 5820
     <211> 1605
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (800)...(1430)
     <223> similar to gi2828151 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5820
aatacaaaag ttagccgggc atggtggcac gtgcctttgg tcccagctgc tcgggaggct
                                                                       60
gaggcaggag aattgcttga acccgggagg cggaggttgc agtgagttga gatcgcgcta
                                                                      120
ctgcactcca gtctgggcga cagagcaaga ctccctttcc aaaaacaagc aaatgaaaaa
                                                                      180
atagagtttt ctctatcaca caaatqqqaa qqtttqtatt qaatqttata tttatcctct
                                                                      240
atccagtett gtettggage acaaageaaa aaggeecage atcetecaet atettetgaa
                                                                      300
aacttgccct caggcctgag caagagggct gcccggttgc ttccatgtag ccagccagca
                                                                      360
```

```
tatgtgcagg gccaagtcta gagggaggag ggggtggcac atggatggtt tcgtttaatt
                                                                      420
ggaagacagt gggtagattg gagctggcat ttgaagatgt tgagagttgt ggatcatggg
                                                                      480
caagaaaagc gctgttctgg gactgcgggg caggagaagg aaactgatgc ttctgagggt
                                                                      540
gagtetgatg agataacatg cetgtgtgtg ggeeteaggt tagacagtge tgaggtetee
                                                                      600
cgtcactggg catccagctg ggtgctacgg ccgtggctcc tgccttctgc agccctgtca
                                                                      660
gggcccaagg ccttccccat cagcacttgc tccagcctac tcactggagt tgtgttctgg
                                                                      720
gtgggtgtgt agaatactcg cactcctact tggggcatca gggagctctc tagcaatttc
                                                                      780
ttctgcacct agggagagcc cactgctaaa aaaggcctag tcaaatcctc aggtgtacat
                                                                      840
ggacatcaag attgggaaca agccggctgg ctgcatccaa accctcctqc qttccqacqt
                                                                      900
cqtqcccatg accacagaga attttctcta catqtgcacc catttaaagg actcggcttc
                                                                      960
aagggaagca getteeaceg cattateece cagtteattt gecagggeag tgattteaca
                                                                     1020
aaccacggtg gcaccagggg tctgcgcagg catggcacta agtgtcccat ggcacatttg
                                                                     1080
gccctcatgg aggcctcaaa agggcaggac cagcaccctc ttctacggag gaaggaacgg
                                                                     1140
gcacagcagg gtgagccact gcgcctgatc aaggcatcac cgttgaacct cctaagagga
                                                                     1200
aaacataagg ctgtgcaata ccaggaactg ggattctagg ttgccccaga caccaaggca
                                                                     1260
tcaaaagcca ggggatccag agaaaacaca gacagccaag agagaaactg cgggaaaaag
                                                                     1320
ccaaaaggtt gagagccaca ccatctagaa gcttcctgcc tgtggtgcgg cacagaaaca
                                                                     1380
aggagagtca gcaattacca gccagccaaq gtcctggaaq ctgacqtaga gctcgtgccg
                                                                     1440
acggcagacc tgccggccgt gggagccgcg gacgtcatct gcagggacag aaggggcaag
                                                                     1500
gtcttttctg gggttcctgc tgtgtgcagc tactatgggg taccagggtg ggggatgccc
                                                                     1560
tgatgagcac atttgtcaaa taaatgaatg acaggaaaaa aaaaa
                                                                     1605
```

```
<210> 5821
<211> 1503
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (145)...(608)
<223> similar to gi871830 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5821
cctggaggga ggcaggaagg gtggacacgc ctgtgtgggt gatgggcaga ggggacctct
                                                                       60
cetteetgte teectegage eeggageate teteetteet qtetecaqqa etacaqtatt
                                                                      120
gacgaggagg ccgccttcca ggctgctctg gccctgtctc tctctqaqaa ctgaaqqqaa
                                                                      180
gcgcagccac ccgcctgcgt ctggggtcag ggatgtcccc gctcctgtgt cgcacctggc
                                                                      240
acctgetegg gagegeacet caceggactg ageteacagg aggageetge accegegeag
                                                                      300
aaggggagcc ggggccgagc ctccgggcct gaatacgggc cagccgccga ggccgccaga
                                                                      360
gcagggccgc ctggtcccac cggcgtcgct gggttcttcg gtgcttctgg ccqaqcaqqc
                                                                      420
ggcctacttg ggcagggctg gacgctggga cctggagctg ccgccgtctc ttcaaagcca
                                                                      480
tgataccccc tcgtgggaag aagggaccga cgcgcgagtc gcgctccgca gtcgagccgg
                                                                      540
gaggaaccca ggctgctgcc ctgcccagcc cgaccctgcc ccggccccgc ttccaccttg
                                                                      600
egeatttggt actggetttt gtgataetta ggaaceetgg catettttet atattateea
                                                                      660
gtgtgataat cttttcacgt tttatagagc aaagacagag cagttactct tcatattgca
                                                                      720
atatctgtgt ttgactagga ataatagtat ttttatggaa catttacaaa attatatttt
                                                                      780
ttaagaaaac aatcaaaaca agcattgggg gattggggca aggatggaag gagcagtggg
                                                                      840
gcagctgcca gagctcaggc gagccatggg qtctqctqtq qqqtctqccc tqqccaccca
                                                                      900
ctgtgtgtct gggtccttga ggtttgtacg tttctctttg atgaccagga agaaatccca
                                                                      960
```

```
gcaccccage cacaggetgt ggetgetece ageagaggeg gggeeggeag agaagggee
                                                                    1020
tectecacee agagteetgg cettggeeeg etgteacett caaagetgae tgtgeeege
                                                                    1080
tgcgggaggg gacggcaccc cagtggtggc agagcttggg ggcctgggca ggggcccgct
                                                                    1140
tggcgggccg ggcaacacgt caacattett ttetgttett ggcattaatt attgetgtet
                                                                    1200
ttttttaaaa aaaaaagtt taaataaaat gtctcagagc atcaaaaaaa aaaaaagggg
                                                                    1260
gggccctttt aaaagaaccc ttggggggcc caaatttaac gggggttgga aaggtaaaat
                                                                    1320
ttttttcttt atggggggcc atttaaaacc ctccttggga tttttggaaa agaacctttt
                                                                    1380
ttttgggggg ggaaaaatt ggcccaaccc cccccaaaa tttaaagcct taagggaaaa
                                                                    1440
aaaaaatttt taaggggaaa agggggaaaa acaaccggaa taccctggct gttaaaaaaa
                                                                    1500
atq
                                                                    1503
```

```
<210> 5822
<211> 1945
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1192)...(263)
<223> similar to gi2749982 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5822 ttttttttt ttatctgtat gaaatattag ttttaataaa acagaaccag tccatgtatg 60 gaggcatggg cataaggtca acttgcacta aatgtaactc gtacgttttt tctaaaataa 120 tttcttgagc attgtggtgg ccttatgtac taacccgaag ctgaacttcc tgggaagctg 180 atccaatgga gcacttggaa ttcaqgggtg gagtcttctt cctqqgtcag agctggttca 240 gggtcacatg ctcttgaggt ccctaaaggc cacatgtgct qcatttcqcc caqcagctcc 300 catcacacct cctccaggat gagccccact tccacagaga tacaggcct ggagagggca 360 gcggtagcca gaatgcaggg gcacggggcg qqcqaaqtaq aqctqqtcca qqqacatqqc 420 gcagtggaat atgttccctc caggaagccc gaagattctc tccaaatctg gtggtgtgag 480 gatgtetetg ccaaccacag agteettgaa gecaggggca tagacetega tgcaatcaaa 540 cactgtggga aggcaggcca tccatggcat cttcaaaggc ctgatgaagg aggagggtgt 600 cttcacagtt caggtggatg gagcattggt gatggggcag cggctggccc ctgggagcat 660 tggggggccgc caggaagctg ggcagcctgt ctacggccac ttctgaccaq qctqcaqqqq 720 gacacagget ggaggteegg gaatggagat gatgaetgag tteagetgee eccageetgg 780 aggtttctca ctcagatggg tcaaaggaga cagtgctgca atgtggtgtg cctcttacca 840 ttgatcttgg tgacaggcga ccgggtgtcc agctgagaga ttctctccag gaactcctca 900 ggaagccact cctgtggcgt cagcttcagg aaggtgatct gcggtgatgt gttggacagc 960 accattttgc ttctcacctc tgtgccatct tccagcacaa ctccttgaac acagccttca 1020 ctgttcacct gcaccttcgc cactgtcttt tcagtgaaga tgcttgctcc atgtgtggtg 1080 getgagettg egategeate agagagggea eccatgeeee eetggaegta geeeeaggee 1140 ccctgcattc cctccaggcc ccccatcaca tggtgcagca gcacatacct gtggacagac 1200 catccgactc agatcctgga ggtgggatct catctcccca gagttccagg tgcaactatt 1260 cetttecate ttgatettea gecetteect gecaceatee agecetetee cageageett 1320 caatgagete aagttettgt aagageeett tgeettetet acaeeetete eetaacaagt 1380 gtgtctatgt gcatagctta ttaccacaaa gaaggcaacg atgcccaaac ctgcagctcc 1440 agecetetee tgagetecag eteeggtgte eagetaceea eagatatete eetttggace 1500 ctttcttggc agcatcttaa acccaccacc ttttccccat tctccagctg cttccccttc 1560 aatettteee ateecagtga aeggeaeett teaacaggag gttetgttte egacagaaat 1620

```
ccaggtgtca gccttgaccg ctaccatcct tccccatcta catccacaaa gcaacaccaa 1680 ctcagcctcc aaagggcttt caaggtcatc ccacctctca gcctctctc tcttccttat 1740 gctgctgcag tagtgcccct cattggaccc cctctccac actttctctc ctgcaggtct tgtccacata tatcctggag ccctatctta aagcccagct ctgctcctgc cactcactta 1860 tcaccattcc aagcctccc ggcttggcac tgctcttagg ataatggcca gtcttctagc 1920 aggcactcca gcctcatcc tcatc
```

```
<210> 5823
<211> 1002
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (368)...(837)
<223> similar to gi332566 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5823 ttttcaacct taaaaaattt taatggaatt ttcttctttt tttttttct ttaaataaca 60 atttgacaaa agggtgaaaa aatcctaaac aaggtattga ggccagtgtc caggctgcat 120 tcagttcaca aaactgtcct caggacgttg catggaactg gaaatgtgta taattacaga 180 agaaaacagg gaggacttag tgcagagagg agacgagtgt ggacgggcaa cagcatcctt 240 agtctttcat atttatatat ggtatatgta ttttctatat atatatttat atattttaca 300 tocaggtato coagtoatot gtaccattto coagggagac atgggtgctt coaaggcgag 360 acaggaaagg gttaggcagg gaaggggcag cqacqgtqca qqctqqqqct tqqctcacaq 420 aagctgcagg agcttcagcg actgtaagag ggccccgggc tccgcagacg ccaggtactg 480 gcagcaaagc cagtcctcca gctccacgcc ccgcctgcga tccaccgcct tctccgcaaa 540 cttcatcatc atcagggccc gcttcatgtc gatccagttg tgcagcgtgc cgcacagcgc 600 ctectecgag gtgcccgget getgcaccag etcqcqccqa gqcccccaca qcaqqcactq 660 cagcacgcgc ttggcctcgc cgatgcggat acgcttgatg gggtcggcct ccagtagcag 720 atgtgccagc tgctgcaggc cgggtgagta gagggacagc gcgggcagcg gcggcaggtc 780 ctcctgccgg tagtctctct cccqcaqctg qqcqcqcacc tcqaacqqqt tqqqttqqtq 840 cagcageteg tagatgagga tgeetgtetg gaacteateg aacttgeggt aetgggaage 900 agacacgata tcgggggcca gccgggcctg gctcttcttc tgctgcaggt ttggggtgct 960 gcccggcttc tgcttggcct tcaaaaagtt gctgatgatg ag 1002

```
<210> 5824

<211> 3270

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3271)

<223> n = a,t,c or q
```

```
<220>
<221> misc feature
<222> (1499)...(548)
<223> similar to gi5420387 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

<400> 5824 ggaccgcgct caacggcctc ttctggttgc tgtcttcctc gtccctccgg cccattgttc 60 ctactcacgc gtctcacttt atggcctatt ttctgcatgg atctctggca gcctcqcttt 120 ctccctgacg tttcagcatc atccccagag gagccacact ctgacagtga gggtgcgggg 180 tcaggcgccc ggccgcacct gctgagtgtg cccgagttgt gcagatacct qqctqaqaqc 240 tggctcacct tccagattca cctgcaggag ctgctgcagt acaagaggca gaatccagct 300 cagttctgcg ttcgagtctg ctctggctgt gctgtgttgg ctgtgttggg acactatgtt 360 ccagggatta tgatttccta cattgtcttg gtgagtatcc tgctgtggcc cctggtggtt 420 tatcatgage tgatecagag gatgtacaet egeetggage eeetgeteat geatetggae 480 tacagcatga aggcagaagc caatgccctg catcacaaac acgacaagag gaagcgtcag 540 gggaagaatg caccccagg aggtgatgag ccactggcag agacagagag tgaaagcgag 600 gcagagctgg ctggcttctc cccagtggtg gatgtgaaga aaacagcatt ggccttggcc 660 attacagact cagagetgtc agatgaggag gcttctatct tggagagtgg tggcttctcc 720 gtatcccggg ccacaactcc gcagctgact gatgtctccg aggatttgga ccagcagagc 780 ctgccaagtg aaccagagga gaccctaagc cgggacctat gggagggaga ggagggaga 840 ctggcccctc ccgaagacct actaggccgt cctcaagctc tgtcaaggca agccctggac 900 tcggaggaag aggaagagga tgtggcagct aaggaaacct tgttgcggct ctcatcccc 960 ctccactttg tgaacacgca cttcaatggg gcagggtccc cccaagatgg agtgaaatgc 1020 teceetggag gaccagtgga gacactgage eeegagacag tgagtggtgg ceteactget 1080 ctgcccggca ccctgtcacc tccactttgc cttgttggaa gtgacccagc ccctcccct 1140 tccattctcc cacctgttcc ccaggactca ccccagcccc tgcctgcccc tgaggaagaa 1200 gaggcactca ccactgagga ctttgagttg ctggatcagg gggagctgga gcagctgaat 1260 gcagagctgg gcttggagcc agagacaccg ccaaaacccc ctgatgctcc acccctgggg 1320 cccgacatcc attctctggt acagtcagac caagaagctc aggccgtggc agagccatga 1380 gccagccgtt gaggaaggag ctgcaggcac agtagggctt cctggctagg agtgttgctg 1440 tttcctcctt tgcctaccac tctggggtgg ggcagtgtgt ggggaagctg gctgtcggat 1500 ggtagctatt ccaccctctg cctgcctgcc tgcctgctgt cctgggcatg gtgcagtacc 1560 tgtgcctagg attggtttta aatttgtaaa taattttcca tttgggttag tggatgtgaa 1620 cagggctagg gaagteette ceacageetg egettgeete eetgeeteat etetattete 1680 attccactat gccccaagcc ctggtggtct ggccctttct ttttcctcct atcctcaggg 1740 acctgtgctg ctctgccctc atgtcccact tggttgttta gttgaggcac tttataattt 1800 ttctcttgtc ttgtgttcct ttctgcttta tttccctgct gtgtcctgtc cttagcagct 1860 caaccccatc ctttgccage tectectate cegtgggcae tggccaaget ttagggagge 1920 teetggtetg ggaagtaaag agtaaaeetg gggeagtggg teaggeeagt agttaeaete 1980 ttaggtcact gtagtctgtg taaccttcac tgcatccttg ccccattcag cccggccttt 2040 catgatgcag gagagcaggg atcccgcagt acatggcgcc agcactggag ttggtgagca 2100 tgtgctctct cttgagatta ggagcttcct tactgctcct ctgggtgatc caagtgtagt 2160 gggaccccct actagggtca ggaagtggac actaacatct gtgcaggtgt tgacttgaaa 2220 aataaagtgt tgattggcta gaactgctgc ctccctgact gtgagctgcc ttccacaccc 2280 tgcactgcac tgtgttctct cctcaccctt aacctgcttc actccagtct gttctggctg 2340 tttattacct tgttgcaaaa cagggccgaa gcaaggatta ccttgacaac cctagcttct 2400 ccttagccat cttccttgac agtgtgatct gtttagtgag atttagcatg tgtgaataaa 2460 gtatatgcag gaggaaattg ctttgtcttc ccaatcggta gaaattcggg accataaaaa 2520 ttgtgtttta ccatgtggcc tacaacctta acactgcttt cttaagaagt cttcacccat 2580 ctacatgcta acaactcact cagcctggat ttatctttac tggggaagcc aaacaagcaa 2640 tagaggacct ttacctgtgt tagaaatgag ttggagccaa ggaacactga agaaatagta 2700 tcttaacagt tactgagtcc attgtatgtg cttggctctg ctctgagtga tttatatgta

2760

```
ttaagatttt tcctcacagg tcagatatat actgttacta atttcatttt atagacaggt
                                                                     2820
taagetteet gaaggeeaca ggteecagta aattgtggag eeagaaeeca aaceeaagaa
                                                                     2880
gttttggctt cagcaaatgc atcagacagc ccctgtccat taatagggca caggtaggaa
                                                                     2940
qatqcacaag gatqtgggaa ctatagagaa ccaatctgat gccttggctt aacaaagagt
                                                                     3000
ggacatggca agcetteete tteggggaan aaaageeeag aactgageag atggeeteet
                                                                     3060
ttatgagttc atgtcctccg ccttcagctg gaggtaccat atggcgatgc tacctgtctt
                                                                     3120
tctgctggag gtaccatatg gtaatgctgc ctgtctgtct gctggaggta ccatatggta
                                                                     3180
atgetgeetg tetttetgag gttgaetttt atgeeatgte ttteetaagt gtgtaagaat
                                                                     3240
ttttctgttt gcttcacatt tgactgagaa
                                                                     3270
```

```
<210> 5825
<211> 5010
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)...(3530)

<223> similar to gi5870866 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5825 gtagatttgg ttgctgtgta cgtggaagaa gcaagcgcat gcgcacatgg gcccccttcg 60 tctcagctgt gcgggaacgg ccgagggtaa catcccgggc tcgcgggagg ctgtcagggt 120 aatggccaca cgctgacaga accagccgag tggaaaaggg gagcgaagcc gttcctctgc 180 accetteece aggeetgagg cetteeeget tggtgetgee geegeeactg eeggetgagg 240 aggggcgatg agttggttca acgcctccca gctctccagc ttcgctaagc aggccctqtc 300 ccaggcccag aagtctattg acagggttct ggacatccag gaagaggagc cgagcatctg 360 ggccgagacc attccgtatg gagagccggg aataagttcc cctgtcagtg gaggatggga 420 tacttcaacc tgggggttga aatcaaacac tgaacctcag agtccaccaa tagcctctcc 480 taaagcaatc acaaagccag ttcggaggac tgtggtcgat gaatctgaaa atttcttcag 540 tgcctttctc tcgccaactg atgtccagac cattcagaag agtccagtgg tatcaaaacc 600 tccagcaaaa tcacaacgac cagaagaaga agtgaaaagc agcttacatg aatccttgca 660 cattggccag tcaagaactc ctgaaacaac tgaatcacaa gtaaaagact cttctttgtg 720 tqtttcaggg gaaactctgg cagcaggtac ttcatcacct aaaactgaag gcaagcacga 780 agaaactgtt aataaagaat cggatatgaa ggtgccaact gtaagtttga aagtatctga 840 aagtgtaatt gatgtgaaaa caactatgga aagtatatct aatacgtcta cgcagtctct 900 cacagcagaa acaaaggaca tagctttgga acctaaggaa caaaaacatg aagacaggca 960 gagcaataca cetteteete etgttagtae etttteatea ggtaetteta eeaceagtga 1020 tattgaagtt ttagatcatg aaagtgtaat aagtgagagc tcagcgagct cgagacaaga 1080 gactacagat tcaaaatcaa gtcttcactt gatgcagaca tcttttcagc ttctctctgc 1140 atctgcttgt cctgaatata atcgtttaga tgatttccaa aaactcactg agagttgctg 1200 ttcatctgat gcttttgaaa gaatagactc atttagtgta cagtcattag atagccggag 1260 tgtaagtgaa atcaattcag atgatgaatt gtcaggcaag ggatatgctt tagtgcctat 1320 tatagttaat tetteaacte caaagtetaa aacagttgaa tetgetgaag gaaaatetga 1380 agaagtaaat gaaacattag ttatacccac tgaggaagca gaaatggaag aaagtggacg 1440 aagtgcaact cctgttaact gtgaacagcc tgatatcttg gtttcttcta caccaataaa 1500 tgaaggacag actgtgttag acaaggtggc tgagcagtgt gaacctgctg aaagtcagcc 1560 agaagcactt tctgagaagg aagatgtttg caagacagtt gaatttctga atgaaaagct 1620 ggaaaaaagg gaggctcagt tattatctct tagtaaggaa aaagcacttc tagaagaagc 1680

```
ttttgataac ctgaaagatg aaatgttcag agtgaaagaa gaaagcagta gcatttcttc
                                                                    1740
cttgaaagat gagtttactc aaagaattgc agaagcagaa aagaaagttc aactagcctg
                                                                    1800
caaagagaga gatgctgcta aaaaggaaat caaaaacata aaagaagaac ttgccactag
                                                                    1860
attaaatagt agtgaaactg cagacctttt gaaagagaaa gatgagcaga tccgagggtt
                                                                    1920
aatggaagaa ggagaaaaac tttcaaaaca gcagctgcac aattctaaca tcatcaagaa
                                                                    1980
attaagagct aaagacaagg agaatgaaaa tatggttgca aagctgaaca aaaaagttaa
                                                                    2040
agagctagaa gaggagttgc agcatttgaa acaggtcctt gatggcaaag aagaggttga
                                                                    2100
gaaacaacat agagaaaata ttaaaaaact aaattccatg gtagaacgcc aagagaaaga
                                                                    2160
tcttggccgt cttcaggtag acatggatga acttgaagaa aagaaccgaa gtattcaggc
                                                                    2220
tgccctggat agtgcataca aagaacttac tgatcttcac aaagccaatg ctgcaaagga
                                                                    2280
2340
agcattagag aaggcccaag aagaagcccg tcagcagcaa gaaacattag ccattcaagt
                                                                    2400
gggggacctt aggcttgcat tgcagcgtac agaacaagcg gctgccagaa aggaggatta
                                                                    2460
tttacgccat gagatcggtg aacttcagca gagactccag gaagcagaga atcgaaacca
                                                                    2520
ggaactgagt caaagtgttt catcaacaac aagaccattg cttcgacaaa tagaaaattt
                                                                    2580
gcaagcaacc ctgggatccc agacatcgtc gtgggagaaa ttagagaaga atctttctga
                                                                    2640
taggettggt gaateeeaga eettgetgge ageageagtt gagaqaqaae qtgeagetae
                                                                    2700
agaagaactc cttgctaaca aaattcagat gtcttccatg gagtcacaga attctctttt
                                                                    2760
aagacaggaa aacagtagat ttcaagccca gctagaatca gagaaaaata ggctgtgtaa
                                                                    2820
actggaggat gagaacaata ggtaccaggt tgaattggaa aacctaaaag atgaatatgt
                                                                    2880
aagaacactt gaagagacga ggaaagaaaa gacattgttg aatagtcagt tagaaatgga
                                                                    2940
aagaatgaaa gttgaacaag aaaggaagaa agccattttt actcaagaaa caataaaaga
                                                                    3000
aaaggaacgc aagccatttt ctgtttctag cactcccacc atgtcacgct caagttcaat
                                                                    3060
aagtggtgtt gatatggcag gactacagac atcttttctg tctcaggatg agtctcatga
                                                                    3120
tcactcattt ggaccaatgc ctatatcagc aaatggaagc aatctttatg atgctgtaag
                                                                    3180
gatgggagca ggatcaagca taattgaaaa cctacagtct cagctaaagc taagggaagg
                                                                    3240
qqaaatcact catttacagc tagaaattgg caatctagaa aaaactcgat caataatggc
                                                                    3300
tgaagaacta gttaaattaa caaatcaaaa tgatgaactt gaagagaagg tgaaggagat
                                                                    3360
acccaaactt agaactcagc taagagattt ggatcaaagg tacaacacta ttctgcagat
                                                                    3420
gtatggagaa aaagcagaag aggcagaaga acttcgatta gatctcgaag atgtaaaaaa
                                                                    3480
tatgtacaaa actcaaatag atgaactttt aagacaaagt ctcagttaac ttgtgaaaat
                                                                    3540
tgaattccca tcaaactgaa tgtaagcatt taatatctaa acatttaatg cggacttcca
                                                                    3600
ataaattctt ttatataatt atatagtggg atttactgta gagtgtaaaa attttttaa
                                                                   3660
aattgattta cactatgtag taatatttac agttaaatta ttttgtgcaa tatttgaact
                                                                   3720
ttatttttga aactattctt taaagattta ttttttaaag cattcatttt ttttccttga
                                                                   3780
atagcacaga gatttattac tttatcctca tataaatatg gctagagaag aagaatggtg
                                                                   3840
ttcatatatg tattgtagat atacaactag ttgtatctat aatttgtaag tgtttatata
                                                                   3900
tatattaaga acatttgaag agtaatgtta acatactgaa actttgaaat ctttcacatt
                                                                   3960
taaaatttca acatatctta attactgctc atgaaaatgt acattaagtg ttaaagtaaa
                                                                   4020
aaattattaa atctgtggct attaaatttt aaactaattt ttttccttta aaagtaagag
                                                                   4080
tcacactgac actgtctgaa atttaaagag tgaatgattt aaacttaaaa aaaattttga
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tctgaaaatt tatttcaccc agctttcaca attaagtctg tataaaatgt ggtacctttt
                                                                   4200
ggtacctatc cagagaaacc tgtacatatt caatgttatc tagatgtgat tggataatgg
                                                                   4260
agaaaattta tttataatga ttttgcaatg gcatcaataa catttaaatg attttgaaga
                                                                   4320
agtattattt tactacccta taaaatgaat cgaaaataat aaagttctta acataattta
                                                                   4380
ctctttaaaa attacctgtt catattttgt aaacccatat ttttagcaca ttaaaaatga
                                                                   4440
atgtttgata ttacagaata ttcataacaa aatggaagaa ttataggaat taacttgaat
                                                                   4500
ttggcatttt taattttgtg atttatcatt ttattttttc ttgaaatttc aaacacaagg
                                                                   4560
aaagcataga atagctttta aaagtagcta tgccttcttc caaatgttat tttattcaaa
                                                                   4620
aaggtaacca ggttgtgttt taaacctgtg aaatattgtg atgcatttta ttactgaaag
                                                                   4680
ttatttaact gcctttactt gcacataaaa actctcattt acggccaggt gctgtggctc
                                                                   4740
atgeetgtaa teecageget ttgggaggee aaggegggea tateacetga tgteaggagt
                                                                   4800
tcaagaccag catggccagc agtttggtga aaccccatct ctactaaaaa tacaaaaatt
                                                                   4860
agcctggcgt ggtggtgtgc gcctgtaatc ctagctactc gggaggctga ggcaggagca
                                                                   4920
ttgcttgaac ctgggaggtg gaggttacaa tggagcccaa gattgtgccc actgcactcc
                                                                   4980
agcatgggtg acagagaaag actccgtctc
                                                                   5010
```

```
<210> 5826
<211> 2481
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (129)...(2166)
<223> similar to gi36439 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5826 eggtegaega titegteeag gaggeaeget ggtttteegg ggeegeteea tegegeette 60 ctcctgcgcc tcgcttctcc ggtccagccg ccatcttcct ttccgcacag gggccgccga 120 gcggggccat gcagccaacg ctgcttctca gcctcctggg agccgtgggg ctggcggctg 180 tcaattccat gccagtggat aacaggaacc acaatgaagg aatggtgact cgctgcatca 240 ttgaggtcct ctcaaatgcc ttgtcgaagt ccagcgctcc acccatcacc cctgagtgcc 300 gccaagtcct gaagacgagt agaaaagacg tcaaagacaa agagacaact gaaaatgaaa 360 acacaaagtt tgaagtaaga ttgttaagag acccagctga tgcctcggaa gcccacgagt 420 cctccagcag gggagaggca ggagccccag gggaggagga catccaaggc ccaacaaagg 480 cagacacaga gaaatgggca gagggaggcg ggcacagccg agagcgagcg gatgagccc 540 agtggagcct ctatccctcc gacagccaag tctctgaaga agtgaagaca cgccattctg 600 agaagagcca gagagaggat gaggaggagg aggagggaga gaactatcaa aaaggggagc 660 gaggggaaga tagcagtgaa gagaaacacc ttgaagagcc aggagagaca caaaacgctt 720 ttctcaatga aagaaagcag gcttcagcta taaaaaaaga ggagttagtg gccagatcgg 780 aaacacatgc tgccgggcat tctcaggaga agacacatag ccgagagaag agtagccagg 840 agagtggaga ggaggcaggg agccaggaga atcaccccca ggagtctaaa ggccaacccc 900 gaagccagga agaatctgag gaaggtgagg aagatgccac ctctgaggtg gacaaacgac 960 gcacgaggcc cagacaccac cacgggagga gcaggcccga caggtcctct caaggaggga 1020 gtetteeete tgaggaaaag ggacaeeece aggaggaate tgaggagtea aaegteagea 1080 tggccagttt aggggaaaag agggaccacc attcaaccca ctacagggct tcagaggaag 1140 aacctgaata tggagaagaa ataaagggtt atccaggcgt ccaggcccct gaggacctgg 1200 agtgggagcg ctataggggc agaggaagtg aagaatacag ggctccaaga cctcagagtg 1260 aggagagttg ggatgaggag gacaagagaa actaccccag cttagagctt gataagatgg 1320 cacatggata tggtgaagaa agtgaggaag agaggggcct tgagccggga aagggacgcc 1380 1440 aaaggttett gggtgaagga caccacegtg tecaagaaaa ecagatggae aaggeaagga 1500 ggcatccaca aggtgcgtgg aaagagctgg acagaaatta tctcaactac ggtgaggaag 1560 gagccccagg gaagtggcag cagcagggag acctgcagga cactaaagaa aacagggagg 1620 aagctaggtt tcaagataaa caatatagct cccatcacac agctgaaaag aggaagagat 1680 taggggaact gttcaaccca tactacgacc ctctccagtg gaagagcagc cattttgaaa 1740 gaagagacaa catgaatgac aattttctcg agggtgagga ggaaaatgag ctgaccttga 1800 acgagaagaa tttcttccca gaatacaact atgactggtg ggagaaaaag cccttctctg 1860 aggatgtgaa ctgggggtat gagaagagaa acctcgccag gggtcccaag gctggactga 1920 aaaaggcaat atgacagggt gcccccactt gaaccagctc cttcactaca gaaagaagtc 1980 agettgagtt tecagaette tatgattetg aggageeggt gageaeeeae caggaggeag 2040 aaaatgaaaa ggacagggct gaccagacag tcctgacaga ggacgagaaa aaagaactcg 2100 aaaacttggc tgcaatggat ttggaactac agaagatagc tgagaaattc agccaaaggg 2160 gctgactgtc attggagcgg tgggcactgt taagaagcag ccatcacatg atctgtttt 2220 caccacttca ctgaaagaca ccatttatct acccaagggc agaaagtaga acttactatt 2280

```
cattaaatgt ttgacacaat tggaattgtc tttaatttct gtcagaatgc tattgaaaat 2340 gtgaattgca tgacttgtag catattcttt tctgcaaaat agacatatta acatgcttat 2400 gacaaatgac ttgtgctact tgtcttttgg gaaaatgttt gtctcagttg gaaataataa 2460 aagattcacc tgagaccaaa a
```

```
<210> 5827
<211> 2793
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2794)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2515)...(2217)
<223> similar to gi3850063 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5827 ttttttttt ttgtcatact aaatatttat tttctgcaga ctgacttcgg agtaattctt 60 gagccaggag gggagaggtt agtgttcaaa ttgctgagat cttaggtcaa aaagctacag 120 aaaagaaatc actttgaaaa acacaatgac tcagaggcag tcaccccttg ccagcaattc 180 caagagctga ggaggcttca tgcctcagga catggtgact agttgagtga accagagatt 240 gaggcagtgg tttttacagg ggaagaaaca agccttgggt gtatgggagc aggaaaggag 300 ggtgacagac tggagaaatg ataaaggcca ttttggaagc ccacagggaa gtggtcttgg 360 gaaacctgaa gacactggga tattcagaag gccaagggga tccagcttat cctgttgggc 420 aaggtgctgg gagtgaaggc aggtaagcca tgtcaagggc ctgggaagca aggggaaaac 480 tggaaggggt accccaggtg aagaagggta tggaatgggg tgcagaagtc catggagatg 540 accggcagat ctcagggcgg tttctggcac atcagaagtt gggcttatgc ttcttgagct 600 ccaccataag gtggtgaatg ttgatgagct cagcccgggc agggagggct cggagctgcg 660 gctgggacag gcacccggtg gaagcgatga tagaggctgg atcagctggg tcagcgctcc 720 ctgaatgata ctggtgccat ttctgaagtt ggtgaaactc cgcattacat cctgactcag 780 agattccact gatgatttcc aggaactacc aaagccacgg atcagctgag ttacccgggc 840 ttetteeect egaagteget eageetgtee aegeteaate aaageeteag eeteetteae 900 aaatgccact aaacccccaa aagggggaga cagcaactct tcaatgaatt cctgtgtccg 960 agcattgagc agctgctgga agctctcaac ctctttgctg tcatctgcag cccgctccta 1020 ttaccatcag cacacccagc atcatgtcat agttgttgat cagaaacaca agctgctcct 1080 teettgagga gaaeteaget geeactegga ggaeaaaatt eteeacetee acetgeaget 1140 gtcccagcaa ttgcatggtc cgttcattag gaattgtctg gttgatactg acaagagcgg 1200 aggagaactc tgcatagcgg cgtgtgatat agtggggccg agtatccaac ccccctaggc 1260 gctgggggtc agtgcttcgg acgctctgaa cattcatctc caggatcagt tcaaaccgtg 1320 gccatagcaa ggcaagcacc tgttcccagt acctgtccag ggcaggaaca tccctctttg 1380 ctgcaatgtt acggaaccgg agaacaatgt ggatacagag aaaaacagca atggcatcgt 1440 agcagtcagc tagataagaa tccaggtgtt tcagggtcat gctgagtgta cggcccatga 1500 cagcatggaa caggtcgtgt gcagctgggc cagacacaac aaaaaattca cagatgaaaa 1560 ggtattcgcg gcaggaattg tctaggaggg cgtagtgctg gctgcggaag agggcctcaa 1620 atggatacct ctgctctccg cgctgcgctg tgtgaggcac caggatgggg gcctcaagtt 1680

```
cagtggggga gatgacagag ccgcgggttc ctagggtgaa aatggtgttc ctgctgcgga
                                                                     1740
gcgatggctt tgagaagaat cctttctttg ctgtatcttc cacacccatt agatcatctt
                                                                     1800
tctcagcgac ttcctcatac tgcaccttca tgagccgccc caggtaagag cggtagtaag
                                                                     1860
acaggtaaat cttgctcagc gtctccacat attcatccct gatctccttt gctgttgctc
                                                                     1920
gttcattgcc cagcagaaac tgatagaaga acctgtactt cagcagggcc gtctggggga
                                                                     1980
tctgatagtt ggtcatgggt ttcctgaagg aataaatctt ctggaggata aactctcgga
                                                                     2040
tcttcgtcac tgccttgacc cggagccgat cgagcacgcc tctgacatct gcgcaggctg
                                                                     2100
ctgtgcctct agcttcctgc tctctgactg cqqctqcctt qqcatccaqc tcctqtaqct
                                                                     2160
gctccaagaa cctgggctct gtcactggag cctccagaat tgccgtgacc agagcagaag
                                                                     2220
gcaccaccag accatcaaca agctccccaa gtttcccccg aactgcctgg cgatttcgaa
                                                                     2280
gtcgaatgtt catggctcct gactgttcct gcagtgtccg gatctcagag ctgatggagc
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tgaggtcact ctgaaaagct cccaacatct gctccattcg ctccaggaca gcatcacagg
                                                                     2400
ctgtgatctg gttgtgtaga gatgctatat tctcactctc ttgaatataa tcccqaatqq
                                                                     2460
atttctgttc aatctgctgt agctccagct caacttgctt tgaatagtga cggagatcta
                                                                     2520
cacccatcca cttcatccag gatgaattca tcagaagtga tatccaactc cccaagttgc
                                                                     2580
agtggttcct ggagcccagg accacccgct tccgqcaact qtcaqtcccq qcqaqtccqt
                                                                     2640
tecceggagt ggagetacaa gteccaaagg gtetteetea gegegaaate gtteccaqat
                                                                     2700
atttgagata agttgtttga ctccagctgt cccctttcag ctctaaccac tacgaaatcg
                                                                     2760
tcgacccgga aattnnnngc ggtcacagat ggg
                                                                     2793
```

```
<210> 5828
<211> 1711
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (359)...(1357)
<223> similar to gi642486 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5828 ggaattcccg ggtcgacgat ttcgtgcggt catggaggcg ggcgccggag ccggcgggg 60 agccgcgggc tggagctgcc cgggcccagg acccacagtg accactctag gctcctatga 120 ggcttccgag ggctgtgaga ggaagaaggg ccaacgctgg gggtccctqg aacqacqqqq 180 gatgcaagct atggaggggg aggtgttact cccagctctc tatgaggagg aagaggaaga 240 ggaagaggag gaagaagag tggaagaaga agaagaacaa gtgcagaaag gtggcagtgt 300 tggctctctg tcagtcaaca agcaccgggg actgagcctc acggagacag agctggagga 360 gctgcgggct caggtgctgc agctggtggc agaactggag gagacccggg aactggcagg 420 gcagcatgag gatgactect tggagetaca ggggetectg gaggatgaac ggetagecag 480 cgcccagcag gcagaggtgt tcaccaagca gatccagcag ctccaaggtg agctgcgttc 540 tctacgggag gagatttccc tgttagagca tgagaaagaa agcgaactta aggaaataga 600 acaggaattg catttggccc aggctgagat ccagagtctg cggcaagcag cagaggattc 660 cgcaactgaa catgagagtg acatagcatc cctgcaggag gatctctgcc ggatgcagaa 720 tgaacttgaa gacatggaac gcattcgggg agattatgag atggagatcg cctccctccq 780 tgcagaaatg gaaatgaaga gctctgaacc atccggtagt ttaggtctct cagattactc 840 tgggttacaa gaagaactgc aggagctgcg ggaacgctac catttcctga atgaggaata 900 ccgggccctg caggagagca acagcagcct cacqqqqcaq cttqcaqatc tqqaqaqtqa 960 gaggacacag agagcaacag agagatggct gcagtcccaa acactgagta tgacgtcagc 1020 agagteteag aetteagaaa tggatttett agageetgat eetgaaatge agttgttaeg 1080

```
1140
gtgttgtgag ttggaagagc tacagcatca tcgccaggtc agtgaggagg agcagaggcg
                                                               1200
gctgcagagg gagctcaagt gtgctcagaa tgaggtgctt cggtttcaga cctcccacag
                                                               1260
tgtcacccag tcatccccta cccccaatcc ccccatcttc tccttgcctc ttgtaggccc
                                                               1320
tggtggtcat ctcggctttg ctctggtgct ggtgggctga gacgtcgtcc taatgcagaa
                                                               1380
catgtttggg ttgtggaagc ctatggtatt cttggctatt gcagctgtgg ctctgtatgt
                                                               1440
gttacccaac atgcgacage aggagtcaga gttctgcctc atggagtgat ggcagacctt
                                                               1500
ggccagcgcg agggcagatc cccagtggcc accaccctca gctttqqqca qqacacactq
                                                               1560
tgccagaacc ctccccatat gttccatgtg tccccatctc ctcagccctc agtcacccag
                                                               1620
gctgaaaagg cttgtgggga gcggctgact tccatctcct gccttgtgta agaacctgag
                                                               1680
ttcccttgta attaaatatc aactgaatta c
                                                               1711
```

```
<210> 5829
<211> 925
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (79)...(777)
<223> similar to gi3128208 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

## <400> 5829 tttcgtgggt actggggcgt gcgtgaggcg tttactgatg cttcctggtc cggtggcctc 60 ggtcccggta agccaggcat gaagatcaca aggcagaaac atgccaagaa gcatcttggc 120 ttcttccgca acaacttcgg agtccgcgag ccgtaccaga tcctgctgga cqgcaccttc 180 tgtcaggcgg cgctgcgggg ccgcatccag ctgcgggagc agctgccccg ctacctcatg 240 ggggagacgc agctgtgcac cacaagatgt gtgttaaaag agctagaaac attgggaaag 300 gacttatatg gggcaaaact gattgcacaa aaatgccaag ttcgaaattg tcctcatttc 360 aagaatgcag tgagtggatc agaatgtctg ctttccatgg ttgaagaggg aaatcctcat 420 cattattttg tggcaacaca ggatcagaat ttgtctgtga aagtaaaaaa qaaqcctgga 480 gttcctctca tgtttattat tcagaacact atggttttgg acaaaccttc tcccaaaaca 540 attgcctttg taaaagcagt ggagtcaggt cagcttgtct cagtgcatga gaaagaaagt 600 atcaaacatc tcaaagagga acagggttta gtgaaaaaca ctgaacagag gtagaagaaa 660 aaagcgcaag aaaataagtg gtcccaatcc tcttagttgt ttgaagaaaa agaaaaaggc 720 780 atctaaccca aaagtacttt ctgagaagca gaatgcagaa ggagaatgaa tcctttqgat 840 actttcaagg acattcaaat gtgaaaatga attttttaca actagaagta tttataataa 900 aagaccaaac ttatttttgt aaatg 925

```
<210> 5830
<211> 2129
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1983)...(1659)
<223> similar to gi2887314 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5830
ttttttttt ttagaaaaac atttattgta atcgatcaca ttcaagtcgt agttctgaaa
                                                                       60
gcaaagtgaa aacacacagt acagctatgc ctcagtatcc atgggggatg ggttccagga
                                                                     120
ctgcaacctc aaccctcaga caccgacatc tgaggatgct caagtccctg atgggcaatg
                                                                     180
gcatagcgtt tgcacgtaac ctacgcacac cttcctgtat aatttaaatc atctctagat
                                                                     240
ttcttataat accaaataca atataaatgc tatgtaaata tgctacacca tattgtttag
                                                                     300
ggaataatgg caagaaaaa aggtctgtac gtgttcagta ccaatgcaat ttctttttc
                                                                      360
aaatatttcc tatccaaggc tggttggatt taaatgtgga gaccacagtt acggagagct
                                                                     420
gactgtactg gggaaatctt tagggtagaa acatttttta gagatggttt atatcaccc
                                                                     480
ccttcagaaa gagcaataca ggcatacctc attttactat gctttgtgaa tactgttttt
                                                                     540
tttttttaaa ttgaaggttt gtagcagcct ggcatcaggc aagtctattt ggcaccattt
                                                                     600
tccaacagca tgtgctcact ttgcgtttct gtgtcagcat tttgaacagt aaatattttt
                                                                     660
aaattaaggt ttgtatattt gttagacata atgctattqc acatttagtq gactqcaata
                                                                     720
tgcagtaaac atgacttaga tgcactggga aactaaaaca atgcgcttcc ttgctttatt
                                                                     780
qtqatqttqq ctttaccqaq qtggtctgga actgaaccca caatatctcc gagatatacc
                                                                     840
tgtacttttt actaaaaata tttcatttga gaagtaaacc tcaagaacta ccaggacttt
                                                                     900
tcagatggga agagcgaggc cctggcaggg cgagtctagg tgtgcagcct agtgggggcc
                                                                     960
ggggtcaagt ccactcggta tttgtggctt cactcagcag gccgcccgtc ccctccgtgg
                                                                    1020
ggccattcga cagtccctgg gtaggggacg gttgcactag gaggtaaaca tgattccagc
                                                                    1080
atgggctgct ccaaggccct gagaccccag gacctgcagg ggggtgggat ccagtcctgc
                                                                    1140
agcaggtgct ctgaagagga gtcatctccc aagatgagaa ggccccgggg ggaggatgaa
                                                                    1200
gtgtggtcag accgtcggct gagcgtgatc acttccccag acccatgcgg gtgagaggac
                                                                    1260
teageagacg ceteegaage etgeggeagg eaggeettta etetteactg gggggeeagt
                                                                    1320
cagagggctg tcatggcagg ccagtgcaca tgccaccaac acatgctgct tcatcagtaa
                                                                    1380
tttctggaac atgacactgc acagcggtgg cctctccagc gggacattac tagtaataca
                                                                    1440
ctgatgatgt ggagattccc cagggggcat ccgctgggct tctcccaact cccaaqccac
                                                                    1500
ctcttcagaa tcacagagtc atttaaaggg gccccccacc tccccggagg tgcggcctag
                                                                    1560
tcatcatact ggatctcggc ccgcagctcc ttggtgacgt agttcaccag catggccagc
                                                                    1620
agctgctgct gcagggcctc gctgcccatg accagcgcag tcagctgcac ggcgtccgtc
                                                                    1680
cactccaggt gcctgatgat ggctgcggct tcgttaaaqa qcctctqttq ctcqqcaqqq
                                                                    1740
ggcagctcca ttaggatctg aggaaccggc ttaaactgtc cacttgtcat ccaggcacct
                                                                    1800
aacageeeee egacageeee eecaaeggeg agteeeggtg ggeegeeae caaaeeeeeg
                                                                    1860
acgaaggcca tggcccctgt gaccagggca cccttcccag agtgcttgac agccgccttc
                                                                    1920
atctteetet eeccagaaag ggageacage agetteatga tqteeteeac catgatagte
                                                                    1980
atcgtggcgg gcttgtgtga cttcagcctc tccatgcctc agtttctcca tagggacaat
                                                                    2040
gactacacta acagtgtcca ccccggcacc ggcagggcgg gctcccggca gggcggggac
                                                                    2100
cctctccca aggcactccc gggacgaaa
                                                                    2129
```

```
<210> 5831 <211> 901
```

<212> DNA

<213> Homo sapiens

<220>

```
<221> misc feature
     <222> (22)...(592)
     <223> similar to gi1055186 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5831
ggatgtcctg ctagcgctgc gatggcggag gccgagttgc gtattgacga gctggtccqg
                                                                       60
gagtacctgc tcttccgcgg gttcacgcac acactgcggc agctggacgc cgagatcaag
                                                                      120
gcggacaagg agaaggggtt ccgggtggat aagattgtgg accagctgca gcagttaatg
                                                                      180
caggigates actiggetge cettegggat tatiggaget actiggageg teggetette
                                                                      240
agccgcttgg aggatatata cagacccaca atccacaagc tgaaaaccag cctgtttcga
                                                                      300
ttttatcttg tctacacaat ccagacaaac agaaatgaca aggctcagga gttctttgca
                                                                      360
aagcaggcca cggaactcca aaaccaggct gagtggaagg attggtttgt cctgcccttc
                                                                      420
ctgccatccc cggacaccaa ccccaccttt gctacctact tttctcgaca gtgggctgac
                                                                      480
accttcattg tgtccctgca caacttcctg agcgtcctgt ttcagtgcat gccagtccct
                                                                      540
gtgatcctga actttgatgc ggagtgtcag aggactaacc aggttcaaga agaaaatgaa
                                                                      600
gttctgcgtc agaagctttt tgcattgcaa gctgaaatcc accgactgaa gaaagaggag
                                                                      660
caacagccag aagaggaaga ggccttggtc caacacaaat tgcctcctta tgtctccaac
                                                                      720
atggaccgcc tgggggactc ggaacttgcc atggtgtgca qccaaaggaa tgcctccctc
                                                                      780
tcccagtcac ttcgtgtggg cttcctgtcc tcgctgctgc ctcagagtaa gaagagcccc
                                                                      840
tcaaggttgt cgcttgctaa ggcccttctt cacctcagag ctcgqgccaq aaaqaagcct
                                                                      900
                                                                      901
     <210> 5832
     <211> 2463
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
     <222> (262)...(59)
     <223> similar to gi2465334 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5832
cttccgaggc gatcaggcag catcagtcct cagccgctaa gccaagaagt agtcagtcag
                                                                       60
agageettgg gecagagtte caggggetet gggagtgget accaggtgag ttgaacagte
                                                                      120
cgatttccag tggagtctgg atttgaaatt ggtgagatgt ttcttgggtt ggtcqgtatg
                                                                      180
agtacatgag gtcgtaggtg gatctttctc acggaccaaa gagcaggagg acaggggatt
                                                                      240
gateteegaa gggaggteee eeaatttgag teteggeace aaattteatg cacgteeatg
                                                                      300
tgaagagacc accaaacagg ctttgtgtga gcaacatggc tgtttatttc acctgggtgc
                                                                      360
aggcaggctg agtctgaaaa gagagtcagc gaagggagat aagggtaggg ccgttttata
                                                                      420
ggatttgggt aggtaaagga aaattacagt caaagggggt tacccgaagc tcggcgtccg
                                                                      480
tgatggtcta gggggcttcc gaggcgatcg ggcagtgtca gtcttcagtc gctaagccga
                                                                      540
gaagatctgg gaaggaattg caactttttt ttttattatt gtacaccttg aaggtgaggt
                                                                      600
taattaagtc ctgttgtggg gtttgaggga aacaggccct tgaaaagaag gtaatgtgga
                                                                      660
```

720

gcgggtagcc tccgtattga ttaagaaggg gacgggctta ccttccactg tgagagttac

```
cggaagctcg gcgtccgtga tggtctacgg ggcttccgag gcgatcgggc agcatcagtc
                                                                      780
ttcagccgct aagccgagaa ggagtcagtc agagagcctt gggccagagt tccagggact
                                                                      840
ctggagtggc tgccaggtga gttgaacagt ccaatttcca gtqqqqtccc qcacaqatqq
                                                                      900
gacacggctt aggaggaatc ctgggctgca tgcattcctt ggcctggtag tcagatttct
                                                                      960
ggcacttgta gcaagctcct gggggagaag gttctggagt aacgcctggc cgctgcggtt
                                                                     1020
caggcatttg gaagttettg tgtgctggag atgtggctgg ggtttgtete acagtggagg
                                                                     1080
ttacctaacc aaactcctgc aaaaccacac cacctatgcc tgtgatgggg actatttgaa
                                                                     1140
tctacagtgc cctcggcatt ctacgataag tgtccaatcg qcattttatg qqcaaqatta
                                                                     1200
ccaaatgtgt agttcccaga agcctgcctc ccagagggaa gacagcttaa cctgtgtggc
                                                                     1260
agccaccacc ttccagaagg tgctggacga atgccagaac cagcgggcct gccacctcct
                                                                     1320
ggtcaatagc cgtgtttttg gacctgacct ttgtccagga agcagtaaat acctcctggt
                                                                     1380
ctcctttaaa tgccaaccta cttcagatga attaaaaaac aaaaccgtgt gtgaagacca
                                                                     1440
ggagctgaaa ctgcactgcc atgaatccaa gttcctcaac atctactctg cgacctacgg
                                                                     1500
caggaggacc caggaaaggg acatctgctc ctccaaggca gagcggctcc cccctttcga
                                                                     1560
ttgcttgtct tactcagctt tgcaagtcct atcccgaagg tgctatggga agcagagatg
                                                                     1620
caaaatcatc gtcaacaatc accattttgg aagcccctgt ttgccaggcg tgaaaaaata
                                                                     1680
cctcactgtg acctacgcat gtgttcccaa gaacatactc acagcgattg atccagccat
                                                                     1740
tgctaatcta aaaccttctt tgaagcaaaa agatggtgaa tatggtataa acttcgaccc
                                                                     1800
aagcggatcg aaggttctga ggaaagatgg aattcttgtt aqcaactctc tqqcaqcctt
                                                                     1860
tgcttacatt agagcccacc cagagagagc tgccctqctq ttcqtqtcca qtqtctqcat
                                                                     1920
eggeetggee cateacactg tgegeeetgg teateagaga gteetgtgee aaggaettee
                                                                    1980
gcgacttgca gcctggggag ggagcagcct ggtgccagga agtgacaagg tcgaggagga
                                                                    2040
cagcgaggat gaagaagagg aggaggaccc cctctgagtc tgatttccca ggggaactgt
                                                                     2100
cggggttctg taggacttca tatcctatat acagttccat agaagctgca gagctcgcag
                                                                    2160
aaaggattga gcgcagggag caaatcattc aggaaatatg gatgaacagt ggtttggaca
                                                                    2220
cctcgctccc aagaaacatg ggccagttct actgaaaacc acatgcatct tgatqcqatc
                                                                     2280
gcactttctg aagaaggaag gatcccaaat gcccctccag ttctggttca cctgtacctt
                                                                    2340
ctatgaagga gaattcgtca tgtcattcaa cactcgtgag gccaggaagc tattaaaggg
                                                                     2400
atgtttcaag ctgtttctag cacattccaa aataaatgag gagggaagag tcaaaaaaa
                                                                     2460
aaa
                                                                     2463
```

```
<210> 5833
<211> 1403
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (27)...(1269)
<223> similar to gi4321845 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5833
gtttcgtctc gaacttggtc ggggcgcgga tcccgagagg gaaagtcata acaaccgcac 60
gagggagttc gactggcgaa ctggaaggcc acgcctctc ccgcctgccc cctcagccct 120
gtggctgggg gcagagctca gactgtcttc tgaagattga tgtctatttc cttgagctct 180
ttaattttgt tgccaatttg gataaacatg gcacaaatcc agcagggagg tccagatgaa 240
aaagaaaaga ctaccgcact gaaagattta ttatctagga tagatttga tgaactaatg 300
aaaaaaagatg aaccgcctct tgattttcct gataccctgg aaggatttga atatgctttt 360
aatgaaaagg gacagttaag acacataaaa actggggaac catttgttt taactaccgg 420
```

```
gaagatttac acagatggaa ccagaaaaga tacgaggctc taggagagat catcacgaag
                                                                  480
tatgtatatg agctcctgga aaaggattgt aatttgaaaa aagtatctat tccagtagat
                                                                  540
gccactgaga gtgaaccaaa gagttttatc tttatgagtg aggatgcttt gacaaatcca
                                                                  600
660
agacttatta taaatgaaga totggacagt ggcacacaga taccqtttat taaaaqaqct
                                                                  720
gtggctgagg gatatggagt aatagtacta aatcccaatg aaaactatat tqaaqtagaa
                                                                  780
aagccgaaga tacacgtaca gtcatcatct gatagttcag atgaaccagc agaaaaacgg
                                                                  840
gaaagaaaag ataaagtttc taaagaaaca aagaagcgac gtgatttcta tgagaagtat
                                                                  900
cgtaaccccc aaagagaaaa agaaatgatg caattgtata tcagagaaaa tggttctcct
                                                                  960
gaagaacatg caatctatgt ttgggatcat ttcatagctc aggctgctgc tgagaatgtg
                                                                 1020
tttttcgttg ctcacagcta tggaggactt gcttttgttg aactgatgat tcaacgagaa
                                                                 1080
gccgatgtaa aaaataaggt aactgctgtg gcattgacag actctgttca caatgtgtgg
                                                                 1140
catcaagaag ctggcaaaac gattcgagaa tggatgagag agaactgttg taattgggtc
                                                                 1200
totagotoag aaccattaga cacatcagtg gagtocatgo tacotgattg coccoggqto
                                                                 1260
tcagcaggca ccgaccgtca cgagctaact tcctggaaga gctttccqtc tattttcaaa
                                                                 1320
ttctttaccg aagcctcaga ggccaagacc agctccctga agccggctgt gacgcgccgc
                                                                 1380
tcccaccgca tcaagcacga atg
                                                                 1403
```

```
<210> 5834
     <211> 1791
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1534)...(479)
    <223> similar to gi5139689 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
     <400> 5834
tttttttttt ttgcaatact gtaacgacag cttattcttt aataaaagtc aggggtgtca
                                                                       60
gcagcgtcac tggtaagaca tgatggcgct ccacgactga ccaqcaqcqc tqqqaaqqqa
                                                                      120
cacgcagaac ccaccttcca accacgccca acacatcaca gaaatgcctg ctcgtttgtt
                                                                      180
ttgattcata tacaaagtta caaagtattt cctgccccaa attcttaacg aaaatgaaag
                                                                      240
aaaaacccta aaatgcggtg gttttacaag tatattagcc cagaacatcc taqqqcaqct
                                                                      300
gegegggeeg egggtgegge agggegeagg egeaggeace geagageece ggeeagegeg
                                                                      360
aaacggacgc aggcgcattc cccagccctc cqtqqcqttc tcaqcaqcaq atcqcccaqq
                                                                      420
cctggcccgg tcgggcttgg tgttgcctcc gaagtcgaga cgacggtgct gctcagttat
                                                                      480
ettecgeett teegeactat ggtgggeagg egacaetget geggggeagg ettaaggtee
                                                                      540
cttccgcgga tctgtcttct tgctcgcagg gatgcacttt cagggtctca gcaaccgcac
                                                                      600
tettecattt gttecagate caageaegga etggeagegt ggggettgag taggaegaea
                                                                      660
gtctgaccac tccccgaaag ctttagtttg ggcgagttcc atgacatagg ccggtcctcg
                                                                      720
tetettggga eggteeteet ettgetttag ggaetgttte tetgttettg gaagtagggg
                                                                      780
tgctgcaggg cctggtgggc ggcgattctc tcatcgggaa tcatagccca ccattgcgtg
                                                                      840
caggagggag aggcattgtg gggacaaatt ggttgttagt agaggtattc ctgatccctt
                                                                      900
tttaaaagga aaatcaaaat tcatagctct cgactgtttg aacttggtga ggatcttctg
                                                                      960
agcgggtgtg ccgatgacat cgtggatttt tgagatttgg tccagttcat ttactccagg
                                                                     1020
aaagaggggc tgcagactgg cgatctcgta gaacacacag ccggcgctcc acaggtccat
                                                                     1080
cttgtacgtg tagaacccat cagtgaggag acactccggg gcccqqtacc agcqqqtqqa
                                                                     1140
gatgtattcc gtgtacggct gcttggaata gacactccgg caggagccaa agtcccctaa
                                                                     1200
```

```
tttcaggaca tcctttatta gtatattttc tggttttaca tctctgtgaa atattccatt
                                                                    1260
tctgtgaata tgatccaggg acttacataa ctggtacata tagtgcataa ttttttttc
                                                                    1320
tgataatggg tatcttctcc ctcgtattag ctcataaata ttcatgtcca taagttcaca
                                                                    1380
tattagtgca agagaaccag attttctgtc actttcaaag cgctgcttca tttgtttaca
                                                                    1440
tgcatagtag tttccatctc tcaggctttg catcttcata acttcagaaa acgttccctc
                                                                    1500
tectattttg ceaattgett tatagttett catettggat geggaageeg gtgacaacee
                                                                    1560
cttqccgaca ctggacggaa aagaaagaag caggaaggtt gtccccctgc tttccacttc
                                                                    1620
cctgaggcgg ggtcccgcac taggatctcc gtggtggtcc ctcgaaggag agcgttagag
                                                                    1680
atcccgccgc catgttgtgt ccctgtcacc ctaqcaaccq tcaqqccctq aacqccacqc
                                                                    1740
aatcgtctct ccggccttcc gtggccggtc cctcacgcat qcaatctatq q
                                                                    1791
```

```
<210> 5835
<211> 3143
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(3144)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (704)...(3143)
<223> similar to gi5852425 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5835 tttttttttt ttgacgtagt ttcgctcttg ttgcccaggc tgcagtacag tggtqcqqtc 60 teggeteact geaacetetg cetecagggt teaagecatt ettetgeete ageeteega 120 gtagctgaaa tttaccnggt actacccacc atgcccggct aattattttg tattttatt 180 agagatgggg tttcaatcat tttggccagg ctggtcttga actcctqacc tcaqqtqatc 240 ctcggcctcc caaagtgcag ggattacaag tatgagccac tatgcctggc caaccaacaa 300 tctttttaaa agaatcggtt ttttttttt tctgagcagt aggtctcaat agtgggatta 360 aaatattcag taaaccatgc tattaacaga tgtgctgtca cccaqacagt qatgttccat 420 ttctagagca cagaaagaat agattttgca taattcttaa qqqccctqaq attttcaqaq 480 tggtcaatga gcactggctg taacttaaag tcaccagctg cagtgctcct caaagagagt 540 cagcccatcc tttgaagttt tgaagccaag cgttgacttc tctctagcta tgaaaattct 600 gcatcttcac taagcttaat catttctagc tctggactta aagtgagaga cttgcaagtc 660 ttcctttcat ttgagttctt tgaggccact gtggttacta attagcaccc ctqqtqqqtq 720 tcaccctcct ccctctcta tcgagttcac ctacaccggg gcgtggggaa aggcgcttcc 780 tgcaccccac atgccctgcg ctcctggggc tctcccacag ggggctttcg tgagccaggc 840 agcaagggcc atccccctgc tccagcccag ccaggcagcg caggcagaaq qactctccca 900 acctgcccgg gcatgcgggg ctttgtgttc actgccctgg cccctccgaa actggggatc 960 teccatecte agactecetg gtggeeteeg aaceecaaca aatgacagga agaccagaac 1020 cegeagegeg atggeetget gggegegtge teagtgggae acettgggge ceetcaaget 1080 gagtcacagg ggaaaggtgt gettgegeea eecaegteee aceggagtee gtggtgggee 1140 tggagccgca ggtcgccagg gcggcatggg aacccgaaga cggggcacct tcacctccgg 1200 agctcgtgac cccggaggcc tccgcgtcaa gcacagatgc caqccaaccq qqcacctccc 1260 aaccgctcca ggagccgggg ctctcctctg cactcacctc cagcctqtta qatqaqctcc 1320

```
tgtcaacccc agagtttcag caaaaggcac aacctttcct agatccggcg ccactggggg
                                                                 1380
agctgaagga cgtggaagag cccgctttgc tggaaccact cctcagccag gaagaacaca
                                                                 1440
gggctctgct ggaggagcag gttggggcgg gtttggggca gggtggcqqc ctctctttcg
                                                                 1500
eggtgaacct caggettggt gtggagagge gtgtettece ttecagetga cetqeetaqq
                                                                 1560
atccctgagt tccaggtcca gcgagagact ccacacagag gagggctgtc aacaatgaca
                                                                 1620
agaaagcatt cctgagcatc ccggggatcc cagggctggt cccaggtaca gggaggtagg
                                                                 1680
ctgtcctaac tgcatgcgcg ggtttcccag cagcagccta ggatttctaa ctatcccagg
                                                                1740
eggagetete atecettttt eeceegegtt etteagtegg gttggeggag aceteagtee
                                                                1800
gcgaaacact gggccagggc agaagccagg ccagttctcc tttctgcggc tcgactcctc
                                                                 1860
cgcctcttcg ctcaccatca tgttgccaac ccgtgtcccg ccagcctcct cgccagcacc
                                                                1920
atagagegee ttgeaactaa ataaagaeee cagaeetege geaaaeeagg gtgetgeeet
                                                                1980
ttccaggcaa gagggaaggc aggcagagat gaggacagga acggagacag agtgagatgg
                                                                2040
aaggatggag ctaggcaagg atgggtggaa ggagggaccc cggaagggag agaaaqaggg
                                                                2100
2160
accaagggac aaaaggagca agaagcagag aacggaaggc agagacaaaa acggtcttat
                                                                2220
gcctccagaa ccaacaggac ccagaactcc gggaaaatgt tgggtgccca gtacaggctg
                                                                2280
agtgctgggc ccacagcccc gttggccggc ggggcgctca gcggccctct ggatcaccag
                                                                2340
cctgggttac ttcgtcccgg agcaattcag accaattccg tttccqaaqq aatgagcgaa
                                                                2400
ttccccagag agcaatgagc cgagacccag gtagttgtct gtttttcatc cacatggttc
                                                                2460
acagatgaca tatccccacg ttgagccctg caacagagct cgaggcggat agtcccatcc
                                                                2520
acacaggagt cacactcagg ccaactgaag cgtgattctg gattccacgt ttctttgccc
                                                                2580
tctgtaaagg tgcctgttgc tcaagtttct gcccccgaa agcgtgacca tgttgactgt
                                                                2640
ttcgcgagct ctgtggggcc ccagaaactt ccaggaatgc gtggaagacc agcatcgtgt
                                                                2700
cggtgctctc ctttccagtt ttcaaacagg ctatattgga gactccccat tttgcaggaa
                                                                2760
acaggaatcc atcatcaggc cgtgatgcac gggatgtttc ttttctctqt qqtttcqctc
                                                                2820
tcgttgtcta cgtgaaaacg aacgagatga acacaactgc gtgtgtgaga ctatcacggc
                                                                2880
aactgtgaca cccaggcgtt ggcaatagag ttggcagcct gatcctggga caaaqgtact
                                                                2940
gatggacatc cagacacacc ccaccacaat cactagcaaa cccactccca aacacacaga
                                                                3000
3060
acttgaagga gagcaaggga cagagggatg agaaatagaa acggaaggag agaaacagcg
                                                                3120
atggagagag agacagagag gaa
                                                                3143
```

```
<210> 5836

<211> 863

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (234)...(486)

<223> similar to gi2145052 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

```
<400> 5836

tggcgtgtga gtgcggggtg gggtggtggc cgttacgttc tgggcaacgg ctacggcagt 60
ggagaagtaa gaagaaaac aacgtccggc gcttccgcct tcgcttagga ggaggaagag 120
ctggtaggga aaggaaagtg cttcgccctg ggcctggact ggaccgagtc gggttggtgg 180
gggtctgggc tatgagcttt tgagggtcgc ctgggacgcg gagcgagaca cgagagccag 240
gagctatgtc tcagccgcg gcgccgccg ctccgttgcc gccgccacct cctcccctg 300
aggctccaca gactccgtcg tccttggcgt cggcggctgc ttcggggggg cttttgaagc 360
```

```
ggagagaccg gagaatcctt tccgggagct gcccggatcc gaagtgtcag gcgcgtctat
                                                                      420
ttttcccggc ctccggttct gtcagcatcg agtgtaccga gtgcggccag cggcacgagc
                                                                      480
agcaacagct gctgggggtt gaggaggtga ccgacccgga cgtagtgcta cacaacctgc
                                                                      540
tgcggaacgc gctgctcggg gttacggggg cacccaagaa gaacacggaa ctggtaaagg
                                                                      600
tgatgggcct ttccaactat cactgcaaat tgttgtcgcc catattagct cgctatggaa
                                                                      660
tggacaaaca gacaggccgg gccaagcttc tccgggacat gaaccagggc gaactgttcg
                                                                      720
attgcgcctt actgggtgac cgcgccttcc tcatagaacc agagcatgtt aacactgtgg
                                                                      780
gctatggcaa ggaccgctcc ggaagcctcc tgtatttgca tqacactctq qaqqacatta
                                                                      840
agcgggccaa taaaagccag gac
                                                                      863
```

```
<210> 5837
     <211> 1168
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1169)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (123)...(920)
     <223> similar to gi21627 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5837
atttttttt ttcacttcag actaaatttt attaaatatg gtgtcatttg gctacaatcg
                                                                      60
gtttgtcttt ataaaactaa gtaacttatt ttgtagtaaa aacaacccca acccactgcc
                                                                      120
cctctttggc agcccttgaa actcagttca aagctaggcc tggctcccgg ccatqqcccc
                                                                      180
tgctgccttc acctgctgag cgctctagga agcctcccaa atcccaagtg tcaggccccc
                                                                      240
ggagtccatc acctctgcct caaacagcca agcccagggg ctttggggcc gcaggtatga
                                                                      300
aggecectee agtagecaca cetgtgteag ggetgtgeee tggggeetgg ceaacateee
                                                                      360
ccctccctt gaaccatcag gaactgggca agacgcccac cagaggcttg accacagggg
                                                                      420
gcgtgcatcc ccttctgagc ctgggagacc ctaggggagt gggtagcctq qqctqqaccc
                                                                      480
ctggtgggct tgtgttctgg atgtcgctat ggcactttgg tcctcaactc aaacccccac
                                                                      540
ecctacecag gagtetgaga ceteggeett ecctggaett gttgggeaga aaaaggeace
                                                                      600
aaggacagga tgagaaaccc ggaggggcag ccccacaaat gagggcgctc tgacctgtcc
                                                                      660
teccattgee acceeacca ggaacageee etcaactggt cacaqeeace aggaageeee
                                                                      720
aggactgete ceacaceaca geagtgeeet ettetecate ceacecteag gacetaceca
                                                                      780
qqqtcctcca ggcagccagg ggccagctcc aggacagggc aggagaatgc ggtccaggtc
                                                                      840
tggcacgtaa ctgagggtgg gtatgctcca gagaagtaag gcaaatggcc cagatgacga
                                                                      900
ccacctgggg tagacccagg gtctccaggg aatggctcgg gggcagacgc tgtgtctgtg
                                                                      960
tgtgcaggat ctgccccac cagcaggaaa ggggcaggag ggaggcaaag aggaggtgcc
                                                                     1020
caggacttgt accetggetg ccaageaggg tggggtgttt tcatgaggat tgcttttaac
                                                                     1080
caaaagtcct cagccttctg cagacccagg gcagcggcga gttgctctac atcatgtgct
                                                                     1140
ttacggaaat ccnccgcgct aatccaat
                                                                     1168
```

```
<210> 5838
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1346)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1287)...(295)
<223> similar to gi1263289 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5838 tttttttttt ttcctgtgta caaaatgttt aattttgaca aagcagttaa aaggctaggg 60 tggcccttct gcagccactg gtgactggga agagtgctct agggacactg gccaccccc 120 tgctcctgtc ttcagacctc tgctctggga ttgggtccaa ccctgtcctt tgcaqccatq 180 tggcgatcct cagcatggag ctccttgcca ctgtccccca aaggggctca gtcgtccatc 240 ttcacqaaqa ctttqqqccq aqaaaaqatc ttqatqqcct cctctacctq caccaqcttc 300 cggtccagct cagcacggtg gctctggggc tctcagtgag tctgccccag caggcagcag 360 taccagetea egeageaget ggetetgget etggageage ttggteagtg tttccageeg 420 ctggttctca ggcatgcgcg tgtggcctgg gggcatggca gggtccggct ggctctgctt 480 gegggeeteg geeteeegee geeacaggte cetgegetee aacaagtaat gtggeacatg 540 gcccttctgc gtggcattgt agtgctcctg ggcctgccgc tgctgctcta gcacttgtgc 600 caggacctgc agtgagcagg aatgcctccg gggggctctc ttggcagctc gtgcattgtg 660 acgaatgaag tecaceecca ggeetggete ettagetteg ggaeetggtg gggttggetg 720 gggactagat acatggggtg gtgggaggcc agggccgcag cgggagtgcg cccqcaggaa 780 gtgggcagac tetgteccag aggcagggec aggeteetgg agetgggeet tgaceeggga 840 ctccaccttg tegtacttgg gtgagegeca cagagettte aggggeetgg getggeectg 900 ctcccggctg cgctcctgtt ctctgaagcg cttctgaatc tccctgatcc gcctcaqqtt 960 ctccttctca tggtccttag ggtccttcct cttgagagag gccccaggac ctagggagat 1020 cccctcgagt tgcaacagca cgtccccgac gccgcgctgg ccgcgctcca ggatctctcc 1080 ggcaccggga ccgatgcagg ggccacgggg agcggtggtg tccaqgqccc qqtcqqaaqt 1140 cagcaagtcc agcttcagcg cgtttccctc gaggcgccct tgagccqaqq tcggccqcct 1200 gtagttgtca ggacagagcg tcgggtctgg ggggatgggc cccqaqatqc gggacggqcc 1260 ctcgcacatg ccgccggcgc cgcccagcaa cggtgcctga ctaangqtcc tcaannctag 1320 tgtctacaaa qqqqqqqqq cqcqq 1345

```
<210> 5839
<211> 3101
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1)...(3102)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (791)...(1423)
<223> similar to gi4886481 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5839 ttgtatctag ctctccacca gcagaatggt ggtccgggca gcgttccggg aatcactctg 60 cetttgeatg tggtagteeg gagaagatee tgattgeeca cateagaeag tgtgggetge 120 agattcctta tgaggcagaa ataggttttc atcttttcca tgctccagag cttctctgat 180 ttgcttgggt aacctttatt ttctaagata aaggaggaaa tgatacgatc ccaqtcttca 240 ttcttggtat caagcaaaac caggatcagg tcaaatcgac ttaaqaqtqq qctqccqaqq 300 gcaatgttca cagacacgga ctcctggggg tcgtactggc ctttggggtt cgttgctgcc 360 aggatggtgg teettgtgtt cagettgeae aegaggtttg tteteegeet ttgteetaat 420 ccacaccage aggtggagee geagttaaag tttccgagte cattccggga gegggageee 480 atcttgctgg ctgccgaggc cctcgctgga ggaggagggt cagaactcgg gtgcagccaa 540 tcgagggcaa cgctgctact tataagagca gaatgggcng gnnctcgtag tttagtgaaa 600 taggaaagct gcaaaacact gtggagtgct cccgtgtaaa taaaaagagg aaaaaagttt 660 ctcaagtcgc cgctgcacga cgtctggccg gcgctggagc gggggtctgc gctctcccqa 720 gcggccgcgc gctggacttt attgtgccgc aaccagcccc agttcccatt gtttgtgttt 780 ttttcaaaat atggcaaagg ttcaggtgaa caatgtagtg gtgctggata accettctcc 840 tttctacaac ccgttccagt tcgagatcac cttcgagtqc atcgaggacc tqtctgaaga 900 cttggaatgg aaaattatct atgtgggctc tgcagaaagt qaaqaatacq atcaagtttt 960 agactctgtt ttagtgggtc ctgttcccgc aggaaggcat atgtttgtat ttcaggctga 1020 tgcacctaat ccaggactca ttccagatgc agatgcagtt aaggcgtaaa ctggttgggc 1080 ctaattactt ggtacctatc cgaggacaag aatttattaa gaagttgggc taattaatgt 1140 aaataatgaa tatactggag acagaattaa ggggaaaatc caccagtaaa acccagactt 1200 ttcctaagct tcaaaggaat attttggcat cctaatcccc agggtcacaa gattccacat 1260 taattgggaa gataacacag aaaaactgga agatgcagag agcagtaatc caaatctaca 1320 gtcacttctt tcaacagatg cattaccttc agcatcaaag ggatggtcca catcagaaaa 1380 ctcactaaat gtcatgttag aatcccacat ggactgcatg tgaccaccta ccatcccttt 1440 agtacaaatt aagctattaa aaatacacag aactatttcc ctgaaattcc gtaagtacat 1500 agtcaaaaca caatgtgaag aatttgttta aaaacatcct gtagaaagtt tataagaaaa 1560 ccagtatttg aacaaattgt ggaatataaa tacaactatt ttaaggtaat ttttttctct 1620 aatgtgttat tttatttgtt ctgaaactaa tctgattaaa gcatatatat tattttcttc 1680 tcctttatat gtaatgaaag cacttataaa gaaacaggaa tcattagacc aggttgtaaa 1740 gatgtcttgg cctcccagac agtctttgga ccactatttt actgqccttt qaaaqaacaa 1800 agtttacttc aactaaaatg tttcttcctg tgaagacata tggtatcatt ttaatttaag 1860 gggcagattt ccattctttt ttggcatgtc cttaaaaaga ggatttgaaa tcaactatat 1920 gctaccaaga actttaggat ccaattttcc aagccaccgt gaagcctctt atggctacta 1980 ttatagttca tgagatgttg gacagcattt ggtttgtttg gtaagagaag aacaaatatg 2040 gctaattgtt aataaggtcc cctggctatg gtttttgttc ttataacaga gtttagaata 2100 tcagagcatt tcttgaatca tacatcatta ttgtccagtg aattcaagac caaatacaat 2160 atcgggagaa aatacaaact ccctgtgttt aagaataggg gattataatg gctcaaattg 2220 gttcatttga tttctaaaaa taccatgacc tttaaaaatt cttttaatag atcatgttat 2280 tggcagtatt tatataaaaa ccatggattt agaaaggtat atttagcttt attataatag 2340 atacqttact attttggaaa tatatattt ttcacacctg tagtactctt ccccatttcc 2400 tetgacacte atgeagaatg agateaggea tatttgtggt tgacatacte tagatagett 2460 ttccaacaaa tctttgaaaa gcaatcttgg aaaggaattc attaactaaa tggggtaaaa 2520 ggtttctttt tctttgagag ttaagtcctt cctcaaaaaa attttcttat gctccataaa 2580 attgaggtag aatattttcc attattcttg ccaqctaaqc aaqacaqccc atatgatgca 2640

```
ggttatgcag tgccttcata tcttaaaact tttaatactg caccttttta aagcttttat
                                                                     2700
gttgagggca agggaaaagg ggcatttgtc gtaaacatgg attctgagtt gtatatattc
                                                                     2760
cccatccatt cctaaaaaag tgaatttgtg aagcaaagtt ttgcccagat gttaaacttt
                                                                     2820
gaatttaata taccagatta ttaaaaatatt gtccattaac tagttcatag attttaaaag
                                                                     2880
taaaatactt ctgactgtta aaactatata aagaaaatct catttgtcta attgcaatta
                                                                     2940
aaagaaaaat gttaaaatat taaaatgaaa ataaaagcat tactttccaa caaagagctc
                                                                     3000
agtggttaat ataataggaa caacatatgt qcttattaqa aataaaqcat atacagccaa
                                                                     3060
atcaccaaat aaagccattt actgctgagt ttttatcgga a
                                                                     3101
```

```
<210> 5840
<211> 2829
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (217)...(1550)
<223> similar to gi1707274 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5840 cccacgcgtc cgacgaccac gggccggaag gctgccaggc ccagtgggca agcgaagaaa 60 tgaaccaccg caacgeggge gettegggge ggggeegagt gegaacetga geeccaaate 120 ccgacccagg caggggcggg gcccggagcg gggccttgga ggcccagccc gcgcggcgac 180 gtctccgcgt ggcgtcacgg caccgactga cggccaccca ccatggccgc agaccagcgc 240 ccgaaggccg acacgctggc cctgaggcaa cggctcatca gctcttcctg cagactcttt 300 tttcccgagg atcctgttaa gattgtccgg gcccaagggc agtacatgta cgatgaacag 360 ggggcagaat acatcgattg catcagcaat gtggcgcacg ttggqcactq ccaccctctc 420 gtggtccaag cagcacatga gcagaaccag gtgctcaaca ccaacagccg gtacctgcat 480 gacaacatcg tggactatgc gcagaggctg tcagagaccc tgccggagca gctctgtgtg 540 ttctatttcc tgaattctgg gtcagaagcc aatgacctgg ccctgaggct ggctcgccac 600 tacacgggac accaggacgt ggtggtatta gatcatgcgt atcacggcca cctgagctcc 660 ctgattgaca tcagtcccta caagttccgc aacctggatg gccagaagga gtgggtccac 720 gtggcacctc teceagacae etacegggge ecetaceggg aggaceaece caacceatgt 780 ggaggatgga ctggaaaagg cattcagtta gaaacgtgtg gtccaaggaa qaaacaggca 840 aatctgcagg aggcagattg cagccttctt cgctgagtct ctgcccagtg tggqagqgca 900 gatcattccc cctgctggct acttctccca agtggcagag cacatccqca aqqccqqaqq 960 ggtctttgtt gcagatgaga tccaggttgg ctttggccgg gtaggcaagc acttctgggc 1020 cttccagctc cagggaaaag acttcgtccc tgacatcgtc accatgggca agtccattgg 1080 caacggccac cetgttgcct gcgtggccgc aacccagect gtggcgaggg catttgaagc 1140 caccggcgtt gagtacttca acacgtttgg gggcagccca gtgtcctgcg ctgtggggct 1200 ggccgtcctg aatgtcttgg agaaggagca gctccaggat catgccacca gtgtaggcag 1260 cttcctgatg cagctcctcg ggcagcaaaa aatcaaacat cccatcgtcg gggatgtcag 1320 gggtgttggg ctcttcattg gtgtggatct gatcaaagat gaggccacaa ggacaccagc 1380 aactgaagag gctgcctact tggtatcaag gctgaaggag aactacgttt tgctgagcac 1440 tgatggccct gggaggaaca tcctgaagtt taagccccca atgtgcttca gcctggacaa 1500 tgcacggcag gtggtggcaa agctggatgc cattctgact gacatggaag agaaggtgag 1560 aagttgtgaa acgctgaggc tccagcccta agccagccct gctctgccta agtgtactcc 1620 agaagaaact catctcatcc aaatacacgc tattgagaag gcgagcctga cctccctctt 1680 acagataaag tcagctttca gaggctcagg gtgggggggc ctgcccgagg ccataatgct 1740

```
acceacece tectectaae caetggtetg ttggaataae eeagatgtet geateeeete
                                                                     1800
aagtcagtca atttcctttc tgtccactgg gggtggaatg gggtagggtg ggatacttta
                                                                     1860
aagtgctcct gcttaaataa attagaccag accagtgtat ttctaaagaa aatcctgaca
                                                                     1920
tgcacaccca ttaaaaatag tacattttac agtgtcccag tcatactttt aattggcaaa
                                                                     1980
ttaaaataat gcaatctgat atattctatc ctactaaatt aaaaatactg aatataacca
                                                                     2040
actaaatata cttactccta agactcacta ccaqtaqttt cacttaaact ctgccttaga
                                                                     2100
ggctcttccc acccatttcc cattatggca catagagaaa aaggcctcta tcactgtcca
                                                                     2160
ctggagtaat aaccactgct tcccctaact gcctcaaaga ctgtcatttt atagaaaatt
                                                                     2220
taagactatc ctaatccact ctttccaaac tcccaqccaq gatagagact tccaggagtt
                                                                     2280
ccacctgtcc caccttatct ggctgccaac tcctgctcag aaacagaacc tgccacaccc
                                                                     2340
tgccactgca ggccgcaacc tcaactccca actgccaact tgaagcctga actacccttt
                                                                     2400
ccctgaccag agttcaggag gggaagagct acacctccct gcacatgaat ccactcattt
                                                                     2460
gaaagcacaa ctgaccctgg atttaagctg gccaggaccc tgggagatct ttggaaggat
                                                                     2520
ttttgcctgg gtttagggtt aacttaaaga ggtgcccaga agaccaagtg aggcagttca
                                                                     2580
tgcctgtaat cccaacactt tacaaggcca aggcagagga tggcttgagc ccaggcaaca
                                                                     2640
tggtgagacc aggctttaaa aaaacatatg agccaggcat ggtggtacat gcctgtggtc
                                                                     2700
ccagctactc gagaggctga gatgggagga tccggtccgc ccatgaggtc aaggttgcag
                                                                     2760
tgagccatga ttgtgttacc gcaccccagc ctggacaaca aagcaagact ctgtctcaaa
                                                                     2820
gcaaaaaaa
                                                                     2829
```

```
<210> 5841
<211> 2320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (337)...(1978)
<223> similar to gi915208 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5841 ggcttcaggc tttcaccagt tctcaggatg cccataggga tgggtgaagc ctgcctggcc 60 tgtggtgctt tccagtggcc gtcattttat tagggcccca cagtggcatt aggatgcacc 120 teteggeggt gtteaacgee eteetggtgt eggtgetgge ageggteetg tggaageatg 180 tgcqgctgcg tgagcatgca gccacactgg aggaggagct ggccctcagc cgacaggcca 240 cagagccagc cccagcactg aggatcgact acccgaaggc actgcagatc ctgatggagg 300 geggeacaca catggtgtge aegggeegea egeacacaga eegeatetge egetteaagt 360 ggctctgcta ctccaacgag gctgaggagt tcatcttctt ccatggcaac acctctgtca 420 tgctgcccaa cctgggctcc cggcgcttcc agccagccct gctcgaccta tccaccqtqq 480 aggaccacaa cactcagtac ttcaacttcg tggagctgcc tgctgctgcc ctgcgcttca 540 tgcccaagcc ggtgttcgtg ccagacgtgg ccctcatcgc caaccgcttc aaccccqaca 600 acctcatgca cgtctttcat gacgacctgc tgccactctt ctacaccctg cggcagtttc 660 ccggcctggc ccacgaggca cggctcttct tcatggaggg ctggggcgag ggtgcacact 720 tegaceteta caagetgete ageeceaage ageeteteet gegggeacag etgaagacee 780 tgggccggct gctgtgcttc tcccatgctt ttgtgggcct ctccaagatc actacctggt 840 accagtatgg ctttgtgcag ccccaqqqcc cqaaqqccaa catcctcgtc tcaggcaatg 900 agatccggca gtttgcacgg ttcatgacag aaaagctgaa cgtgagccac acaggagtcc 960 ccctaggcga ggagtacatt ctggtcttta gccgaaccca gaacagactc attctgaatg 1020 aggcagaget getgetggea etggeecagg agttecagat gaagacagtg acagtgteec 1080

```
tggaggacca cacctttgct gatgtcgtgc ggctggtcag caatgcctcc atgctggtca
                                                                    1140
gcatgcatgg ggcccagctg gtcaccaccc tcttcctgcc ccgtggggca actgtggtag
                                                                    1200
agetettece atatgetgte aatecegace actacactee etataagaeg etggeeatge
                                                                    1260
tgcctggcat ggacctccag tatgtagcct ggcggaacat gatgccagag aacacagtca
                                                                    1320
cacaccctga gcggccctgg gatcaggggg gcatcaccca tctggaccgg gctgagcaag
                                                                    1380
ecegtateet geaaageegt gaggteeeae ggeatetetg ttgeeggaae eeegagtgge
                                                                   1440
tettecgaat etaccaggae accaaggtgg acateceate ceteatteaa accatacgge
                                                                   1500
qcqtqgtqaa gggccggcca ggaccacgga agcagaagtg gacagtcggc ctatatccag
                                                                   1560
gcaaggtgcg ggaggcacgg tgccaggcgt cagtgcatgg cgcctccgag gcccgcctca
                                                                   1620
ctgtctcctg gcagatccca tggaacctta aatacctgaa ggtgagggag gtgaagtacg
                                                                   1680
aggtgtggct gcaggagcag ggggagaaca cctacgtgcc ttacatcctg gctctgcaga
                                                                   1740
accacacctt cactgagaac atcaagccct tcaccaccta cctggtgtgg gtccgctgca
                                                                   1800
tetteaacaa gateeteetg ggaceetttg cagatgtget ggtgtgcaac acgtagegag
                                                                   1860
caggccacag cctggcctcg ggaaggtggc tcctgcagtt cagcgtccct gggcccatta
                                                                   1920
atcccactgt ggagacttct gggaactatt tattgagcag gcctgtgcct ccacatcatc
                                                                   1980
ttgttgtctc tggggtgtgg tgtcacagca ctcctctttg ccctagagat aagggacctg
                                                                   2040
acttcccctt ctcccatcct gaacatttgt acccctggag aagttcctta gcagggagga
                                                                   2100
ggaagaggag aggaggaagc aaagaatcac aaggaacctc tggctaggtg atcctgatgt
                                                                   2160
ttcctactga gtttttctgg tatccagatt tctggaaacc gagtaatcat gtactgtttg
                                                                   2220
attgggtggt tcatctgctt ccatcccagt gaaatttacc tgtagcccag tgaagggtgt
                                                                   2280
2320
    <210> 5842
    <211> 4331
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (4133)...(2522)
    <223> similar to gil663704 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5842
atctctgtct aggggtcaca aattgaaatg gcaagtgctt ttccattcaa tctaatactt
                                                                     60
ccggattcct actaaaaagg aatacattaa gagcatggaa aagttgctta ctgaaaggaa
                                                                    120
acccccgaag agtaagggag ggaatgtaga aattaagaag ttatgtggaa tactctttaa
                                                                    180
attgtaatta actacatttt cttattttca cagtaataca aaacacagtc acttgcagaa
                                                                    240
ctggttcaga ttacttaaat accagataca tttttagtcc tctacataag tgtttgggag
                                                                    300
ttacttatgt ttatatgaaa tgaagctatt aatacttttc tactgaatat ataatatgat
                                                                    360
cccatttatt taaaaaataa agattacata tttgcttata tacgcataca aattttctga
                                                                    420
aaattacata agaaattgtt aatagattac ctctggagaa tagtactggg gtaagaggtg
                                                                    480
agggggcaga atteteattt tacageetta tataetgttg tgaatttttt tttttaceat
                                                                    540
gtacttttta aaaatacaaa attgaggagg gaacctccta ctccaaaatt acgaagcatt
                                                                    600
```

660

720

780

840

900

960

cttttatgta catttctcta agagttatat ttgatatttt tcaaggcaaa ctgacttgag

gtactcgatg tttttaaatg tatttctaat aattattagt agggtcacac ctatttgaca

gcttttttaa aaagtcacat attgctgtat ttttaaagat gacaaacctt tatttaaatg

agatgcttgc tggagatttt ctttttcaaa ctcacttttt aagttatgga aataatatca

ctgctgaaag tttggaaaac atatataagg gtgccaaaaa taccactaaa atcacataaa

ccaatcttac cattattaat ggtgtgattt ctttctttac atatctatta atacctagta

```
ctatctatgt agaaaatgtg tttgcaaagc tgagatcaca ctgtacctat agctctggat
                                                                     1020
cctgctgctt tttcccccaa cacttaacag atgctcagta aacatgttaa accaagttgt
                                                                     1080
taattagtat tgtaccattt ctcctcatca aaaattactt ctatagaagg catttagttg
                                                                     1140
gtttccagtt cttgagtaaa ataaataaca cttaatgagt atgtctttac ctaaacattg
                                                                     1200
tctgcattta tgatttagaa gaagctactg gatcaaacgg tatgaaatat tttaagtttc
                                                                     1260
tgataaatgt ttttcagaag aattatactg gttttcactc ctaccaacag cgcagcctgt
                                                                     1320
qttqctgttt ccttgccaac actgtcacca ttttaaaaag tcactgttat ttcacaggta
                                                                     1380
aaaaatagaa agtttgctct gagaaaattt cttcctccca ttacaaaata aagtcacagt
                                                                     1440
ctttccgtat gtccactcta gagtgctatc ttccaatcta aaacagagga actgttttca
                                                                     1500
aacatcatta gtttagcggt ctccactaac aaagacatac ggataaagta acatgtaagt
                                                                     1560
cagattaaga atctcaactt tttaagaaaa accaaatgac taaaggcata tttttattct
                                                                     1620
atactttttg teetataggt aetetaggte ettgtgtaat tattgaggae aaaaegteag
                                                                     1680
ttaaaggtga gagggaaaac taggttgcag actagcagct gttttgcatc tcacaagaac
                                                                     1740
aaaggcctta acaaaccgta tactttatgc aaacaaagtg atgcctcact gacttaggag
                                                                     1800
acaagtcaca tgccatcagt gtgtcagaaa atttctttct tcagtgatag ttaaggtaac
                                                                     1860
ctcgccagct actttccaga gacagctcca gggcaatact ggggaaaaaa aaaatcagag
                                                                     1920
acataggacc tcaatagagc cctgtgcaac aaaaagatgc tagataacaa aactcaaagc
                                                                     1980
aaaactaaga tcattccaat ttaggggaaa gtttttttat tcagtgttta agattaaaaa
                                                                     2040
ctacaagatt ttgcttgcag ctgatgagta aaaagagaag ttaaacataa attctcatct
                                                                     2100
gagtggctag ttaaaatgct ctgacaccga qtcaaqttac tcaqtgacat accaqttact
                                                                     2160
ttgggcttaa gagtcttgga gcaaagtagc tctaaacaaa acgtgtcatc tgaagcatag
                                                                     2220
ggctaatggg catatgaaat actaaataag aagctgatgg aggcaggctg tggcagattt
                                                                     2280
ttggttcttt tagggttcta gcagtggttg ccatataagc aaggacctag cagagagtta
                                                                     2340
tttcctgtct ttacttttct gagttaaaca ccttcaaccc acacccacta agcaggaata
                                                                     2400
aagagacatt ttatagacca gttggaaaat ataaagcagt cccacttctc cagtagaatt
                                                                     2460
ttagttgaat taaatcataa gagaaacaat gattattgca catattatac ttgtcacact
                                                                     2520
acatctgttg agtggaattt ccattccaag tgttgttttc atcttcacca tcatcttgag
                                                                     2580
tecttaatet ataaatttte eesteettt taaagtegte teeaegtttt teeageaete
                                                                     2640
tttttctcac tggttccctt ttttctgatt tgctagatga tgcagggttt gggggttctg
                                                                     2700
acgatgttac tctcactgaa gtctgtgtgg gaggcggatt actaaacaag aaattgctaa
                                                                     2760
ttaatctcca gatggcaagg aatggataaa gcactgttcc caacaaggtc caaatgtctc
                                                                     2820
cgctggaaga gtgtacaatg gatgcagttg gtcttcctgc ctagaaatta ataaacaaac
                                                                     2880
tggcaacagt accaccgaag cgcttggggc aagttccaaa tccagtaact tctttttata
                                                                     2940
atcttctttg gtaaattccc tcctgggaaa catggttgct aacgaaaaat taccgtaagt
                                                                     3000
gttgccaaca gtctgtgcag caaactgcct tgcctcttct agaggagcat cagaagggaa
                                                                     3060
ctgatttgta aaggaagaac catcaggaag acggaattga attcttgcaa cagtgcttct
                                                                     3120
ttctcttgca taagattccc tcttgacttc catttctgcc tgttttgcta gcaaggcagc
                                                                     3180
agetttggca geetetaett etteetttgt etttgcaaaa egageagete tetetgeaeg
                                                                     3240
gtccaatgca atctgctgtt ttatacgttc tcgagctgcc ctatcttctg ctttctctt
                                                                     3300
gtttctttcc tccagcattc tttttgttaa ttcttcttct tgttttcttt tataatccaa
                                                                     3360
cattlctttt ccagtttttc tcctctcaat ttccttctta atttctctct gttcttcctc
                                                                     3420
ttttcttttc tcttctccc tttcttcaag tttttttgtt agtctttcca ctcggatgtt
                                                                     3480
gaggtcctct gcaggtctct gatctgagca tccactaggc tcctgagagg aagtggcatg
                                                                     3540
gcctgcactt tctcctcctg ttgcagtatc tgactttgta tcagaagtgg atggtatctc
                                                                     3600
acaaagctct gcatttctgg actgagagtt ttcacaagtg ttgttaggtt caaatgacgc
                                                                     3660
agatggagta gacactgaac tttctgactg actgccattt gctactgatg tttcactttt
                                                                     3720
tagcaaatgc atctgtcgga ccttgtgaat tcttgtaaca agttcatctg cagaaacact
                                                                     3780
teetgetatt aetteeaagg gaatteeact gteteeaata aagaaactgg atggaacaca
                                                                     3840
cactacagga tagatttgtg aaaactgtag gcaggettea ettttggtat egattttaat
                                                                     3900
agcaacaaaa ctgtttgaag atgcttctgt aactttatca tcttcccaac ttgcagccat
                                                                     3960
ctgtgtagac tgttcatcat cacctgccac gaacaccacg aagaccgcgc cgctcctttt
                                                                     4020
ggccgtcgcg atggcggccg gaatggcgcc ctggaaccac agcatcgctc ccttcgggcc
                                                                     4080
caggogotog ctoggtgtgt agtotocgca gtocogaago oggotocgco otocgtotto
                                                                     4140
gtccggctct gcggcccccg caaccttggc tggttcggcc cccacctccg gctccgcaca
                                                                     4200
agegegeacg eccgteageg geacceggag acgegegeta gegegegega gaacacetea
                                                                     4260
cgtcacagtc gcaacccgtc ggtgtccgtg ccccaggacc ttctctcgtt ggcgagtcga
                                                                     4320
tggtcggcgc a
                                                                     4331
```

```
<210> 5843
<211> 2077
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)...(2079)
<223> similar to gi35483 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

## <400> 5843 cggccgcagc tccccggcgg aggcaagagg tggttggggg ggggactttg gctgacgttt 60 tcccgggcaa cgactccacg gcgtctcagg acgtggccaa ccgcttcgcc cgcaaagggg 120 cgctgaggca gaagaacgtg cacgaggtga aggaccacaa attcatcgcg cgcttcttca 180 agcagcccac cttctgcagc cactgcaccg acttcatctg ggggtttggg aaacaaggct 240 tccagtgcca agtttgctgt tttgtggtcc acaagatggt gccatgaatt tgttactttt 300 tettgteegg ggtgeggata aggggaeeeg acaettgatg acceeaggag geaageeaca 360 aggttccaaa atccacactt tacggaagcc ccaccttctt gcgatcactt gtgggttcac 420 tgctctatgg acttatccat caagggatga aatgtgacac ctgcgatatg aacgttcaca 480 agcaatgcgt tcatcaatgt ccccagcctc tgcggaatgg ttcacactga gaagaggggg 540 eggatttace taaaggetga ggttgetgat gaaaagetee atgteaeagt aegagatgea 600 aaaaatctaa tccctatgga tccaaacggg ctttcagatc cttatgtgaa gctgaaactt 660 attectgate ecaaggaatg aaagcaagea aaaaaccaaa accateeget ecacactaaa 720 tccgcagtgg aatgagtcct ttacattcaa attgaaacct tcagacaaag accgacgact 780 gtctgtagaa atctgggact gggatcgaac aacaaggaat gacttcatgg gatccctttc 840 ctttggagtt tcggagctga tgaagatgcc ggccagtgga tggtacaagt tgcttaacca 900 agaagaaggt gagtactaca acgtacccat tccggaaggg gacgaggaag gaaacatgga 960 actcaggcag aaattcgaga aagccaaact tggccctgct ggcaacaaag tcatcagtcc 1020 ctctgaagac aggaaacaac cttccaacaa ccttgaccga gtgaaactca cggacttcaa 1080 tttcctcatg gtgttgggaa aggggagttt tggaaaggtg atgcttgccg acaggaaggg 1140 cacagaagaa ctgtatgcaa tcaaaatcct gaagaaggat gtggtgattc aggatgatga 1200 cgtggagtgc accatggtag aaaagcgagt cttggccctg cttgacaaac ccccgttctt 1260 gacgcagctg cactcctgct tccagacagt ggatcggctg tacttcgtca tggaatatgt 1320 caacggtggg gacctcatgt accacattca gcaagtagga aaatttaagg aaccacaagc 1380 agtattctat gcggcagaga tttccatcgg attgttcttt cttcataaaa gaggaatcat 1440 ttatagggat ctgaagttag ataacgtcat gttggattca gaaggacata tcaaaattgc 1500 tgactttggg atgtgcaagg aacacatgat ggatggagtc acgaccagga ccttctgtgg 1560 gactccagat tatatcgccc cagagataat cgcttatcag ccgtatggaa aatctgtgga 1620 ctggtgggcc tatggcgtcc tgttgtatga aatgcttqcc gggcagcctc catttqatqq 1680 tgaagatgaa gacgagctat ttcagtctat catggagcac aacgtttcct atccaaaatc 1740 cttgtccaag gaggctgttt ctatctgcaa aggactgatg accaaacacc cagccaagcg 1800 gctgggctgt gggcctgagg gggagaggga cgtgagagag catgccttct tccggaggat 1860 cgactgggaa aaactggaga acagggagat ccagccacca ttcaagccca aagtgtgtgg 1920 caaaggagca gagaactttg acaagttett cacaegagga cageeegtet taacaecaee 1980 tgatcagctg gttattgcta acatagacca gtctgatttt gaagggttct cgtatgtcaa 2040 ccccagttt gtgcacccca tcttacagag tgcagta 2077

```
<210> 5844
     <211> 2268
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (1)...(2269)
     <223> n = a,t,c or q
     <220>
     <221> misc feature
     <222> (116)...(1880)
     <223> similar to gi4877951 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5844
gccgagccga gctgggggcg cagagcgcgg gagggcggcg gcggcgcgga gcccaggtgg
                                                                       60
ctccgctgcc ggatgggagt gccccagtgt gctggatgaa gctggcgcat qcaccatgtc
                                                                      120
atcatgtgtc tctagccagc ccagcagcaa ccgggccgcc ccccaggatg agctgggggg
                                                                      180
caggggcagc agcagcagcg aaagccagaa gccctgtgag gccctgcggg gcctctcatc
                                                                      240
cttgagcatc cacctgggca tggagtcctt cattgtggtc accgagtgtg agccgggctg
                                                                      300
tgctgtggac ctcggcttgg cgcgggaccg gccctggag gccgatggcc aagaggtccc
```

```
taccatgtaa ttcacccacg ggaagtgtat gattcagtgg tttctaatac agacttctgc 2100 agccattacc accatcaact ttacgacatt ttcatcagcc caagaagaca ccctacactc 2160 cttagctgtc cccatccaac tccccaccc cagtaaccac tcagaatagg tatggatttg 2220 cctattctgg acgtttcgta taaatggcgt catacactaa aaaaaaaaa 2268
```

```
<210> 5845
<211> 2363
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2364)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (2198)...(915)
<223> similar to gi35435 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5845 actataccga gagactgaag aagtggaaat atatgtggaa cagagccttc ctccatggta 60 tgaaatagat ttcctttaaa aaataaaaaa aaaagaagtg aacaatataa gcatattact 120 tagaaacatg gaggtatata cctgaaaaac tcaagagttg aaagtggtca cctctgggga 180 gtgggaatct tgaatgggag gaatgggctg gggctttttt gttataagcc ttgacttttt 240 aaattatgat catgtgtaac tgataaaaat aaaagttaga ataaaagccc tagcacaatg 300 tctgccataa agtaggccct tgataaagaa tggacattta tctaattgtc ccatctctcc 360 acggctgctg ccccactttt tgcattcagc aatatagaca tttgatccgt tcctcaagat 420 tctattctcc cccttcctaa caaagtatgg caggaaaaaa aaaaaatcac ggtttcaatg 480 gacactttta ttgtttactt aatggatcat caattttgtc tcactaccta caaatggaat 540 ttcatcttgt ttccatgctg agtagtgaaa cagtgacaaa gctaatcata ataacctaca 600 tcaaaagaga actaagctaa cactgctcac tttcttttta acaggcaaaa tataaatata 660 tgcactctag aatgcacaat ggtttagtca ctaaaaaatt caaatgggat cttgaagaat 720 gtatgcaaat ccagggtgca gtgaagatga gctgagatgc tgtgcaactg tttaagggtt 780 cctggcactg catctcttgg ccactagctg aatcttgaca tggaaggttt tagctaatgc 840 caagtggaga tgcagaaaat gctaagttga cttaggggct gtgcacagga actaaaaggc 900 aggaaagtac taaatattgc tgagagcatc caccccagtg aaggacgttt acacttcaag 960 gagetecaaa actgggeace acceeeccag tgaeteaaca tggetggaet tttateetee 1020 ggtgttccca tttgggcaac agccaagtgg gcaggtgtct ccaaccaacc tatgatggtg 1080 atggcaagcc ccctagaagt ggatntgctt tcacccacct catccatgag agctttggtt 1140 ccccggggca aaagcttccc attcaaatac ccccacagga ccattccaca caatctgctt 1200 agcccgagtg acagcctcag catacttctt gctgctttca ggaccacagt ccaagcccat 1260 ccagccagca ggtatgccag aagccacagt ggcttggcca gtcttggcat tctcatcaaa 1320 cttgtcagca gtgacaaagt caacaggcaa ggtaatcttc acaccattct tctcagcttt 1380 ggacattagg tetttgacaa tettggetee etetteatea aacaqaqaaq tqecaatete 1440 catgttgttg agcaccttaa ggaaggtaaa agccattcca ccaccaataa tcatctcatt 1500 gactttgtcc agcatattat tgatgagctg gatcttgtct gcaactttag ctccgcccag 1560 gatggccagg aagggtcgct ctgggctctc caaggccttt gcaaagtagt tcagctcctt 1620 cttcatcaaa aacccaccag ccttctgtgg cagattgact cctaccatgg agctgtgggc 1680

```
1740
tctgtgagca gtgccaaaag catcattgac atagacatcc cctagcttgg aaagtgaagc
teggaaaget tetattttgg etggetegge tttaacettg tteecagaag catettttee
                                                                     1800
cttcccttct tcctccacat gaaagcggag gttctccagc aggatgacag acccagcagc
                                                                     1860
tgggttggca caggctttct ccacttctgg gcctacacag tccttcaaga acagaacatc
                                                                     1920
cttgcccagc agagatttga gttctacagc aactggctct aaggagtact tgtcaggcat
                                                                     1980
gggcacacca tcaggccggc ctaggtggct cataaggact accqacttgg ctccattgtc
                                                                     2040
caagcagaat ttgatgcttg ggacagcagc cttaatcctc tggttgtttg ttatctggtt
                                                                     2100
gttcttcata ggaacattga agtcgactct cataacgacc cgcttccctt taacgtccag
                                                                     2160
cttgtccagc gtcagcttgt tagaaagcga cattttggaa atacagctgg ggagagaggt
                                                                     2220
cggtgattcg gtcaacgagg gagccgactg ccgacgtgcg ctccggaggc ttgcagaatg
                                                                     2280
cggaacaccg cgcgggccct cgtgccaagc ttggcgtgtc natgtcagan ggctatcaat
                                                                     2340
nagggtttca attggggacg tcc
                                                                     2363
```

```
<210> 5846

<211> 3182

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1123)...(2418)

<223> similar to gi5305335 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

<400> 5846 cacgtttctg tatgtcttag gccagtatcc caaacctctt ccacgtcact gttctttcca 60 cccattctcc ctttgcatct tgagcagtta tccaactagg atctgccaag tggatactgg 120 ggtgccactc ccctgagaaa agactgagcc aggaactaca agctcccccc acattcctcc 180 cagcctccct cactctccat gctggcagag caggagggag actgaagtaa gagatggcag 240 agggagatgg tggcaaaaag gtttagatgc aggagaacag taagatggat ggttccgggc 300 cagagtcgat gtggggagga acagagggct gaagggagag ggggctgact qttccattct 360 agctttggca caaagcagca gaaaggggga aaagccaata gaaatttcct tagcttcccc 420 accatatgta ttttctagga tttgagagga aagagaggaa aatgggggaa tgggttgcaa 480 aatagaaatg agcttaatcc aggccgcaga gccagggaag gtgagtaact ttaggagggt 540 gctagacttt agaagccaga taggaagaat cagtctaaac tggccatgct ttggaaggga 600 caagactatg tgctccgctg cccaccttca gcctgcaatg agggactgag gcccacgagt 660 ctttccagct cttcctccat tctggccagt ccctgcatcc tccctggggt ggaggatgga 720 aggaaagctg ggacaagcag ggaacgcatg attcagggat gctgtcactc ggcagccaga 780 ttccgaaact cccattctcc aatgacttcc tcaaccaatg ggtggccttg tgactgttct 840 ttaaggetga agatateeag gaaaggggge ttggacaetg gecaaggaga eeeettegtg 900 ctqtqqacac agctctcttc actctttgct catqqcatqa cacaqcqqaq accqcctcca 960 acaacgaatt tggggctacg aagaggaata gcgaaaaagc aaatctgttt caactgatgg 1020 gaaccctata gctatagaac ttgggggcta tctcctatgc ccctggacag gacagttggc 1080 tggggacagg agaagtgctc aatcttcatg agacaaaggg gcccgatagg gccagcagcc 1140 acaaggeett gacetgeega gteageatge eecatetete tgeacagetg teecetaaae 1200 ccaactcacg tttctgtatg tcttaggcca gtatcccaaa cctcttccac gtcactgttc 1260 tttccaccca ttctcccttt gcatcttgag cagttatcca actaggatct gccaagtgga 1320 tactggggtg ccactcccct gagaaaaqac tgagccagga actacaagct cccccacat 1380 tecteceage etggacetaa ttettgagag gggetetete tteaeggaet gtgtetggae 1440 tttgagcagg cttctgcccc ttgcgttggc tctttgctgc cagccatcag gtggggatt 1500

```
agagcctggt gtaagtgcgc cagactette eggtttecaa agttegtgee tgegaaceea
                                                                     1560
aacctgtgag tctcttctgc atgcaggagt ttctcctggg cagctggtca ctccccagag
                                                                     1620
aagctgggcc ttcatggaca catggaacta agcctcccaa atgggagttc tggctgagcc
                                                                     1680
cagggtgggg agatcctggg aagggaggca ctggaggaag acggcacctc ttcccccatg
                                                                     1740
gcagggtgtg agggaggcag gtttggaatg gtgcgagtat ggcaatctaa gcagggqtct
                                                                     1800
ggtctctttg actccaggct ggcctttggc cgactgtctg ctcacccaga gaccttggac
                                                                     1860
tccggactat ccatggctcc gaatctaagt gctgcccact cccatgctca cacccacaga
                                                                     1920
aggtettece ateceettta gattegtgee teactecace agtgaggaag atgeetetgt
                                                                     1980
ctttcccacg actgccagga gatagggaag cccagccagg actgaccctc cttcctccag
                                                                     2040
cctgccctga cccacctggc aaagcagggc acatggggag gaagagactg gaacctttct
                                                                     2100
ttgacagcca ggcctagaca gacaggcctg gggacactgg ccccatgagg ggaggaaggc
                                                                     2160
aggcgcacga ggtccaggga ggcccttttc tgatcatgcc ccttctctcc caccccatct
                                                                     2220
ccccaccacc acctctgtgg cctccatggt acccccacag ggctggcctc ccctagaggg
                                                                     2280
tgggcctcaa ccacctgctc ccgccacgca ccggttagtg agacagggct gccacggcaa
                                                                     2340
ccgccaagcc cccctcaagg tgggacagta ccccggaccc atccactcac tcctgagagg
                                                                     2400
geteeggeee agaatgggaa eeteagagaa gagetetaag gagaagaaae eecatagegt
                                                                     2460
cagagaggat atgtctggct tccaagagaa aggaggctcc gttttgcaaa gtggaggagg
                                                                     2520
gacgagggac aggggtttca ccagccagca acctgggcct tgtactgtct gtgtttttaa
                                                                     2580
aaccactaaa gtgcaagaat tacattgcac tgtttctcca ctttttattt tctcttaggc
                                                                     2640
ttttgtttct atttcaaaca tactttcttg gttttctaat ggagtatata gtttagtcat
                                                                     2700
ttcacagact ctggcctcct ctcctgaaat ccttttggat ggggaaaggg aaggtgggga
                                                                     2760
gggtccgagg ggaaggggac cccagcttcc ctgtgcccqc tcaccccact ccaccagtcc
                                                                     2820
ccggtcgcca gccggagtct cctctctacc gccactgtca caccgtagcc cacatggata
                                                                     2880
gcacagttgt cagacaagat tccttcagat tccgagttgc ctaccggttg ttttcgttgt
                                                                     2940
tgttgttgtt gtttttcttt ttctttttt ttttgaaaac agcaataccc acagtacata
                                                                     3000
ttactgtagt tctctatagt ttaacataca ttcataccat aactctgttc tctcctcttt
                                                                     3060
tttgttttca actttaaaaa caaaaataaa cgatgataat ctttactggt gaaaaggatg
                                                                     3120
gaaaaataaa tcaacaaatg caaccagttt gtgagaaaaa aaaaaaaacc ccaaaaaaaa
                                                                     3180
                                                                     3182
     <210> 5847
     <211> 869
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (776)...(29)
     <223> similar to gi5824504 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5847
tggttcaagc tgaggccgag tggggacgac gtggagctga ttggagaaga ggaagatgtg
                                                                       60
                                                                      120
```

```
agtgtttacg acattgctga ccacctgac tttaggttcc gtacaactga catcgtcatc 120 cgcatcggca atactgagga tggggctcct cacaaggagg atgagccatc ggtgggccag 180 gtggcccgtg tggacgtcag cagcaaggtg gaggtggtgt gggctgacaa ctcaaaggac 240 atcatcctgc cccagcactt gtacaacata gagtctgaga ttgaggagtc agactacgat 300 tcggtagaag gcagcaccag cggggcatcc tcggatgaat gggaagatga tagtgacagc 360 tgggagacgg acaatgggct ggtggaggac gagcacccca agatagagga gcccccatc 420 ccacccctgg agcagccggt ggcccctgag gacaagggag tggtgatcag tgaagaggca 480
```

```
gccacagctg ccgtccaggg ggctgtggcc atggctgccc ccatggccgg gctgatggag 540
aaggctggca aggacgggcc acccaagagc ttccgggagt tgaaagaggc catcaagatc 600
ctggagagcc tcaagaacat gactgtggag cagctgctga cgggctcgcc cacctctccg 660
actgtggagc ctgagaagcc aactcgggag aagaagtttc tggatgacat caagaagcta 720
caggaaaacc tcaagaagac cctggacaat gtggccattg tagaggagga gaagatggaa 780
gcagtgcccg acgtagagcg caaggaggac aagcccgagg ggcagtcacc tgtgaaggct 840
gagtggccca gcgaaaccc ggtgctgtg
```

```
<210> 5848
<211> 1766
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1708)...(1264)
<223> similar to gi31973 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5848 ttcagtccaa tccagtgatc agagctgcat ttatcccgcc taagaaaatt catttcttt 60 atgttgtcaa ttatagttag gtcggcatgt tagttgcatc agttgttttt tttttttta 120 aaaaaaaaac aatcctttaa taaaattagt ccatctaaaa ctccccaatg cctaaggttc 180 tagtcgtgga agggttagct gcagaattcc agttcagaag ccaacggagg ctcagtccag 240 acagggatta accgacttgt gctggtatct aggtgcttgg attgccgagt tgagtttgct 300 ggaagggaaa tggggcggcg tcggggggcc cgacaggcct ggctgccagt cggcttccgc 360 gaaaacgact cttgctgtcc acatagccag ccgtgaagcc aaactgcagg cctctgccct 420 cccctaaatg tcctcctagg aggcagtcac tcgggaggaa qatqtqcctq ttaccaaqtq 480 cttcgtcccg gccccagcgc agacctatga atgaagatgg agggagagct gatgtgaaag 540 gcctgggtcc cggccgcaga aggggcgcca gaccgaaatc ggcgatcgcg tctctcccac 600 caaagcctcc cggccagcgg ccgcgtctga aagtcctggg ctaagcacca cgccqqqqqq 660 gtaccagaca ccccggctgc agctgccgag ggcctcactc accttgcagg gccgccggcc 720 tgcgtcggcg ctgggactgc gcacgctcgg ccctgcgtca gagcgaggaa gaaaaaggcc 780 aagatettee agaaggtget geggeeteee egeacgeeeg ettgaggega etegggatgg 840 ggcggcttga gtcacgaacg ccgaggcggg gcagggtgcg gcgccggcgc gcctgcccc 900 cggcaggetc ggggtettee gegeeaegga ggteaeeega agagegeege aageegeate 960 eggaaggeee gaaceetace ggaggggegg acggeggaca gggcaaggee cegageeega 1020 cgcggcaggc ggtgcgggac gggagcggtg gcgggggg actcgagggc cgggcggcga 1080 aggcgggcga ggggagggga ggggaagggg aagccgcggc cccgcttgcc ccggcagtct 1140 gaagcggctc agctctttcc atgaaggccg gtggggcccc tttaaagggc ctttgtggtg 1200 gcatggggag gcctggcggc cgggcgcggc ccgggccctc ttagtactcc ttgcggaagc 1260 ettggttgee etttettege egeceegaag ggegeetegg eeceaaeggt ggegetagte 1320 tatcttgggc agcagcacgg gccctggatg gttgggcagg gacgcccttc cctgggcaat 1380 tcgtcaaggc agcccaggaa gcttttagag ctccctcgtc gttgcggatt ggccagcttg 1440 caggtggctg ggggatgatt cgcgtcttct tgttggtgcc gcggccgcat tgcccggccg 1500 gctccaggag tctcagctgg tgaggtactc catgcactag ccgccaaggt agcagcatgg 1560 cctgccggcg ccaacgcgct cggcgtagtg gcccttccgc agcagccggt gtacacggcc 1620 cactgggaac tcgacggccg gcgcgcgacg agcgcgactt ggccttggcg cgggccttgc 1680 egecagtett geegeggeee gaeatgetag egaggtagae eggtgaagea egaeggetea 1740 aacactagaa cagacgccca ccgcag 1766

```
<210> 5849
<211> 1647
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (377)...(1255)
<223> similar to gi190510 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5849 getteactga agtteteett ggteetgatt ettggeetee teecaccaga acgtgagete 60 cttgtgggag gcagtgcccc tcccagcctc ctccctgtca cagactgtgt gggggccacc 120 caggggctga atggaccagg gggtcagcag ggagagtgct aagtggtggc ggggggcctg 180 tggcagaggc cttgtgacag tgagggttga gggctggtcc agagagatga tgtgatcccc 240 aggagaagcc acaggggacc atgacatggg cgccaccagc ttccaggtga acgtggacct 300 ategaaagee agetteaggg caggacaetg teetttetgg aggggatgge eecaeeeeae 360 agacaaggca ggcccagaca actctacccc actgcctaga agtgcgggtc cccagagcca 420 gggtagacco cotgagtoag gagocogggo acagaactga gcacotgcao tgcaggocoa 480 gggccgggtt ccctggagaa ggagaaagac tgaagccact gcctacctcc tgcccacaac 540 agactgcagg cccatttggt gacacaggac aagcagcaca tgtgtcgaac actgccqaqc 600 eegcaggeac geetgeatee cacagecaeg ageetgtgag geteaggeat gtgaeetgea 660 ggagctggag gcgggcggga aggcaggtgg gggcctctcc ctggctggag cagggagctc 720 caggagacct caggacggcc cccacccggt gggtaaggac cctqtttccc aatttqcccc 780 caaggcctaa tggacccacc gggcttaggg agtcctcact cagaggagag gagcccaccc 840 ctcccaggac acctggctga gccggaacag cagcgcaggg gagctgtgac agcagagagc 900 agcaccaggt cacacaagca gccgccccgg aaggacacgg cccatggtga cagaggacaa 960 gcagcatgcg tgtgtcagac actggcctgg cctqtqqaca cqcccqcqtc ccacaqccat 1020 gaccctgcga ggccaggaga gactgctcca gggcacatga cctgtggtag ctggaagtgg 1080 ggcagggagg cgcagccaca ctcctgctct ggtccgaggg agatctcagg aaaccgactg 1140 ggaaatcacc ccccacaggg acccccaccc ctcccagcct cactgcgccc cgtcaggcca 1200 ggcagctgcc ctcagggtct gccaaggtgg gggtcaaggg ccatgggggc aggtagctct 1260 gcctgcaaag cccacaagca tgtcagatca cctgggctgc agacagacaa acacctgagc 1320 tgttctgaat accttcaggt tcctggcctc gctgagcaag tgcagaaatt tttaccttca 1380 aggatcaggg tttttctgtt tgtttgtttt ttaacacaca catatgtgaa caaaqagtat 1440 1500 gcgtttgtac tggcagaaga agcgtctggt aagacaacca gcaagttaac aatggtcacc tccagaaatg ggctgggtaa accaaagaat ttttttgttt ttgttttttt tqaqtcaqqq 1560 tetagetetg teacecagge tggaaegeae tggtgtgate aeggeteaet geageettga 1620 cctccctggc tcaagcaatc ctcccag 1647

```
<210> 5850
<211> 1544
```

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1108)...(209)
<223> similar to gi2660716 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5850 ttttttttt ttcccttcca catttcgtat taaatacctg aaatatatta atcttaaaaa 60 acaatatcga tacagtactc aatggataga ggcagtggag tgaacaagaa gcccagattg 120 caaaatcgta ggtcataaaa aaactggagt gcgcgtgcgt caggttccag gcacgcgaga 180 aaaagcaacg cgaaagcttt cagtctcgga ggaggttttc gggcttgggg tagccgaaga 240 300 cgaaccagtc ctcctcccag ctgctgggcg gtcctgttcc cggtagctcg gggggaagcg 360 gagetgecag gtecacetgg agtagetgea geagetgege ggegteeteg tecagagtet 420 ccagcttccc cacgaagtcg tagtcgatct ggcacgggtg gcagaggcgg tacacctgcc 480 gccagtgctc gttgaagggc gccagcttct ccgtgtgcgg gtccagcagg tactggatga 540 agttggcgaa ggacaccttg aggccagcgc ggaaggcctc gcgcgccgag gcgggcaggc 600 tggtgtggtt ggcgtacagc cgcagcatgg gcacggcgaa cttgcggtag aactcctcgt 660 tctccagctc gaacttgctg cggaaggcgg agatcaggcg cacgaagggg tcgcgcacga 720 agaggaactt ggtgtacttc ttgagcttga ccttcatgag gtggcgggag agcttcccgt 780 agcggcgcca gaacttgttg aaggtcaggt gcgcgctggc gttgtgcacg tgctcgcgcg 840 ggatgcgcag cgggtcgcgg tagggcgcac cgcggtgcag caggcttccg ctcagcacga 900 tcatcacgcg cttccagttg gtgcaggcca ccttgggcac gtagcagtag atggcccgt 960 gccggtcgtc cacgatcagg tggctcagct ccgagttggg gatgtcgtcg aatggqcqct 1020 ccttggtggg gaaggccagg ctggagttgg cgcagaagcc ccgcagcacg ctcctccgct 1080 ecgectgetg eeggeeetgg tetgggetge geegggegte gegeggggae eaqteqtage 1140 eteteaeget eteeteeatg eteeeeggeg eaggeggetg eteegtetee tttetgggaa 1200 ggtcgctctg cttcacgcca gcactgagaa acttgtccag aaactcgtcg acatcggagt 1260 cggccgtgag ctccctgtcc ctgtccggcc cgggcgtggg cagcggcgcc cccgtgtgcg 1320 gcctagagaa ggacgtgtgc aagtagaagt gcgcggcgcc tgcgctgtcc cagtacacga 1380 tgatcagcag gatcatgaac accgacccca gcaccagcca cagccggaac agccgggcct 1440 tggtcatcct gccccgggcg ggctgggccc tctccgggcc tctcacttca gcttcctgca 1500 gagccggggc atcctgctgg gaacctcgcg cccctcacct cgcg 1544

```
<210> 5851
<211> 1598
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1599)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (160)...(1117)
<223> similar to gi1334643 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5851
tgaaagaaac agtgcagttt tgttgctcac agggacccgt ccccacacac tggagagact
                                                                       60
ttgaaggttg gggttctgcc cattccacct ggggaatatt ctgggcccag cctaaaaagt
                                                                      120
tetgttgggg ceetaaggee tggggeagge teetggggge tgtggageee gaggageeag
                                                                      180
gcagagcggg gtccttgggg gccaagccca tgcgtcggat gctgtcctqg tacttgcggc
                                                                      240
ggccgagctc caagactgcg cgcacctctt cagccacgtc ctgccggtca ctctgctcca
                                                                      300
gggcctgcac caggaagccc cacagcccct ggctgcccag cctggcgctc agcccaggag
                                                                      360
aagagcatgt gacggatctg ctcatccaga tcatcccgga actcgtgccg gatgcgctgc
                                                                      420
acctcccggt aggacacccc caggtgcagg gccacggctg gccagtccag acccaqacgc
                                                                      480
ccagccacac tcagcaggtt gctctgcgtc agaaagccgg tctcggcatc tcccagattc
                                                                      540
aagggtgcca aggagaggcc agcccccgc cgtggcccct cggaccctcg aagtctcggc
                                                                      600
agettgatgg geagagtgge catecaeagg gegtetgege cetteetetg eegggeagee
                                                                      660
tcagcctcct cgggcacccg cacaggcacc gcgccacggt agaaggacac ctccttcaca
                                                                      720
ttcttcaggt gcgagtagaa gacaaagcag attctqccct ccacacagtc agggcggtca
                                                                      780
gcatccacgt cgatgccgcg ctcgaaggcc gcaaaqaact cttcgccctc gaacatctcc
                                                                      840
accgtgtcag agggctcggg gccccggtac cgctccagca gccgccgaag ggtggcgtcc
                                                                      900
cccttgtttc ggggcaggca ctgcagcagg acctgctcag ggtcccggcg ccqctqcaqa
                                                                      960
gcgatgaggt tcacacggtg cagccgcagc cgctcccagg ccttccgagc caggcctccc
                                                                     1020
acacagttct tggtggtgta ccagagccag taccaggaga agtgtgtgac ctggaagcgt
                                                                     1080
gcgtacaggt gggtgagctc caggaccacc tgagctgtga tgtcatccca ggtggctgca
                                                                     1140
ggaggggccc agtacaacag gtgcaggcgg gagcggtcca gactgaggcc tgtgatgcca
                                                                     1200
gagggcagag gcagctgcac ggtgaccggt tggaggaagc tggggggacc gctctgtgac
                                                                     1260
aggcacagca gggggctcac tgcagcctct ggttctccca ggagggcctg cagctctcgg
                                                                     1320
ccagccatgc gcaccacctg catggagact cgacgaggct cctcagtggc cccagggqqq
                                                                     1380
aagatgactt tgaccccagg atgacccgag gagcacagca gtgtcccctc cggtggcacc
                                                                     1440
aggcaggcat tggacacagg gcgggaaacc acaaggaacc aggagaagtg gggcacctgg
                                                                     1500
cagtgagccc agagccgctg gggtgcctct tcctccaggt aggtctccag gtcaccccag
                                                                     1560
ctgttgtcga agtccnccgc gagggctatc atctcagt
                                                                     1598
     <210> 5852
     <211> 1040
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (820)...(40)
     <223> similar to gi200549 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5852
ggaattcctg tgctcatggc ctgcatgacg ctgctgccca cctggttggg aggcgctccc
                                                                       60
ccaggccctc ccggccccga catctcctcg ccctgcggct cctataaccc ccactcccag
                                                                      120
ggcctggtca cctttgccac ccagctcttc aacttgctct cgggtgaggg ttacctggaa
                                                                      180
tggtcccctc tcttctatgg cttctacccg ccccgcccac gcctggcggt cacctacctg
                                                                      240
tgctgggcct ttgccgttgg cctcatctgc ctcctgctca tcctgcatcg ctcggtgtct
```

300

```
gggctgaagc agacactgct ggcggagtcc gaggctctga ccagctacag ccaccgggtg
                                                                      360
ttctcggcct gggacttcgg tctctgcggg gacgtccacg tgcggctgcg ccagcgcatc
                                                                      420
atcttgtacg aattaaaggt ggagctggag gagacagtgg tgcggccca ggctgcggtg
                                                                      480
cggacgctgg gccagcaagc cagggtttgg ttggtgcggg tgctgctcaa cctgctggtg
                                                                      540
gtcgcgctcc tgggggcagc cttctatggc gtctactggg ctacggggtg caccgtggag
                                                                      600
ctgcaggaga tgccccttgt ccaggagttg ccactgctga agcttggggt gaattacctt
                                                                      660
ccgtccatct tcatcgctgg ggtcaatttt gtgctgccgc ccgtgttcaa gctcattgct
                                                                      720
ccactggagg gctacactcg gagtcgccag atcgttttta tcctqctcaq qttccaqcct
                                                                      780
cacggggatg gctgggaatg atgaagggtg ggggcggtca gagggatgtt ggcgctgaca
                                                                      840
ggtaagacac ggaaatcctg ctgataccga atccagggat tcaaatcctg actctgttgg
                                                                      900
ccaggtgcag tggctcacac ctgtaatccc agcactttgg gaggccgagg ctgaggtcag
                                                                      960
gagttcgaga ccagcctgac aaacatgatg aaaccccgtc tgtagtaaaa atacqaatat
                                                                     1020
tagcccggcc gtagtggctt
                                                                     1040
```

```
<210> 5853
     <211> 1086
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (862)...(497)
     <223> similar to gi1911774 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5853
ttttttttt ttcaattaaa gatttgattt attcaagtat gtgaaaacat tctacaatgg
                                                                       60
aaactettat tagatgetge atgtaetgtg etatggaeca egeacataea geeatgetgt
                                                                      120
ttcagaagac ttgaaatgcc attgatagtt taaaaactct acacccgatg gagaatcgag
                                                                      180
gaagacaatt taatgtttca tetgaateca gaggtgeate aaattaaatg acageteeae
                                                                      240
ttggcaaata atagctgtta cttgatggta tccaagaaga aatggttggt gatggataaa
                                                                      300
ttcagaaatg cttccccaaa ggtgggtggt ttttaaaaag tttcaggtca caacccttgc
                                                                      360
agaaaacact gatgcccaac acactgattc gcggtccagg aaacacgggt cttccaagtt
                                                                      420
ccaaggggct ggggttcccc aacgatcaag ttcctgtgct gtaatcaaga gggtcctttg
                                                                      480
gactggatag ggagcacttg ggagctgtac accatcagtc ataatggatg gcagtgtaaa
                                                                      540
agatgatcca aatgaccatg aacaaggcaa aagaggtcat aaacccttcc ttcgtgagct
                                                                      600
cccacgtgcc accatattct tcctcatcaa tctgtaggta attgctgaag tagaggtaca
                                                                      660
ggactcctgc attgatcagg cagaatcctg ctattcccaa gaaccctcgt aatggcaaaa
                                                                      720
ctccccaaat gacacccagg accacagcaa tgatctgtcg gaaccagtag atcacatcta
                                                                      780
aaaattcatc cttatcctcc caggccgcgt cgctccgcag caccttactc cagacggaga
                                                                      840
ctttgagggc cccgttggcc agctgcggct gaggcggctc ctccttccgc cgcccgccgc
                                                                      900
teatectece gtegegeege eegggeeggg eetggggege gegggetgag eeaaagggta
                                                                      960
gtcggggtct agggtcgcag gtcacggcgc ggggcggctg caggctcagc ggcccggtcc
                                                                     1020
tgcgggcgct gcggttcctc acaacctggc caagctaccc ggttgccgcc ggctctacag
                                                                     1080
agcagg
                                                                     1086
```

```
<210> 5854
     <211> 701
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (667)...(663)
     <223> similar to gil345536 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5854
ggaattcaag acgccaagat ggcgacgagt cagtatttcg acttcgcgca gggcggcggc
                                                                       60
ccgcagtaca gcaccctcct ggaggacggg actttggtct ggttattccc cgctgctgtg
                                                                      120
acagogocca tgacagoago tggtococao tggcacocag qaaqtattta tocaatqact
                                                                      180
caatgaatct gccgccggat cgcccgggac tgctttcact ttctgtcagt ccagaagtgg
                                                                      240
agaccactee eeeggeeett geatetggge tteettgtge eetgeettgg acagttgget
                                                                      300
gcagtggaag tgacgctgtg actgccctgt gcccaagctt aagaggcctt gcctgcatct
                                                                      360
getecatett atgggaeeet geetggtgaa ggaeecaagg etggeetget ggaggaggag
                                                                      420
atataaggag aagagtcaca gtgccccatc caacaggtag ctgcctcca ggggcagaga
                                                                      480
agcccagcca tggtcaggag agccacccag ctgaggccca cctccaccag gattgccacc
                                                                      540
cagctgaacc ccacctcagc caggagagcc acccagctga gccccatctg gccaggagag
                                                                      600
ccatccagct gagccccacc tctgccagga ttgccaccca gctgagcccc gccttggcca
                                                                      660
ggagagccac ccagctgagc cccqccttgq ccagaaaaaq q
                                                                      701
    <210> 5855
     <211> 427
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (210)...(5)
    <223> similar to gi3319905 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5855
ggatattggc ccctcactgc agctgccaac acttggtcag tcactctcag ccatagcact
                                                                       60
ttgttcactg acctgtgtca cagcactgag ctccaccctt ttctgagagt tattacagcc
                                                                      120
aaaaagtgtg ggctgaagat ggttggtttc atgtttctgt attatgtatc tttttgtatg
                                                                      180
gtaaacacta tattctgtac ttaaccagat ctatttttac cccagatggg gatattcttt
                                                                      240
gtaaaaaatg aacataaagc ttttttaatg gaagagcact acacaggggg cgccgatcta
                                                                      300
gaggactcct tgctggaccc agttttacac gaggctgaga gctgttactg cctgccttat
                                                                      360
atggagetga attatteeet ggetggggat aetgggtaag gaacetttat tetgegtagt
                                                                      420
aacaaaa
                                                                      427
```

```
<210> 5856
     <211> 829
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (619)...(191)
    <223> similar to gil619936 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5856
actagagaga aaaacgtatc ataaatcctt atgttgccca ctttaacaat tgccaacata
                                                                    60
tgaccataac aattaacaac atatgactaa tcttatttca cctttaccta cctccctcat
                                                                   120
tagtttgaat cagattgcag ttattttatt tgtaaatatt tcagtattct gatattcagt
                                                                   180
tgatcttttt tgtttatcct tctgccaggg ccatactatc ttgattactg gagggttata
                                                                   240
ttaagtatag aaggcaggta ggttaaattc cccaattttt ttctcagcta ttcttggact
                                                                   300
tttgcctaag tcaaatttaa aattcttctg tcagtttcta gaaagaagcc ttctgggctt
                                                                   360
ttgatttctt tttcatttct tgtgaaacaa atatcagatg ggcttttgat tttgattgca
                                                                   420
ttgaatctaa aggtcaattc tgggagaatt gacatccttg acaatagtct tttgatccat
                                                                   480
gaatgtggtg tatctctccc tttatttagg tctttaggtt ctctcaatat tttctagttt
                                                                   540
tcagtataca aatcctgcac atctcttggt acatagattt ctaaatattt catgcttttt
                                                                   600
660
tttaagtagt gaattatctt tttagaaaat taaaacatga gagaaaaggc cttqqttttt
                                                                   720
tatattatgt taaaaatatt agttttgttt acacattctt ctggtgtgct ttattgtctg
                                                                   780
tagaaatgtt accctgcagc ctgggcaaaa tagtgagaaa ctatctctc
                                                                   829
    <210> 5857
    <211> 1344
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (777)...(103)
    <223> similar to gi2648022 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5857
ttttttttttg ccaggtgttt ttacatttta ttagctacag tatagatcct agagctgcct
                                                                    60
cattecetee ceteceetee ceteceecea ceatggaggt caggeettge caggageece
                                                                   120
tgcctttgct gcctgggccc gctggaactc ctgctgcagc tgagcaaggg tctccctctg
                                                                   180
ttgctctgac tgccgctcaa gatcccgaag ctgggattcg tatcgcttac taaggagaga
                                                                   240
caagggagac aagcagaaag ggagaaatta gtaggactca ctatggagag tgctaaacgc
                                                                   300
```

```
aagaaagaga taggtggaaa acttgagatc caggggaggg agaagaaggg gggttaaaag
                                                                      360
ggaaggaaag ggttggagga actggaggac taggggccac tatggagagc tgttctgcaa
                                                                      420
tggttcaaca cctctactcc aatggttcac ttgcatcaca gggtgcagca cacggtggtg
                                                                      480
gaataaaaac tcacatttca gctgtgatat agtccagcct cttccctact gtggcccgag
                                                                      540
cctccccag ctcctgtttg actagcaccg gacccagaag tttaaagacc acgttggacc
                                                                      600
catccagcag ggccagttcc tgatggaggg atgggacata tgtgatcaga accatggcta
                                                                      660
gtacaggtcc ctcctcgccc cacaaatccc agtccctcac ctctttcacg atattatttt
                                                                     720
ctgttagttg tgcttcaagt ttctgcctcc ccgacatgga tttacttaag tctggggatg
                                                                     780
agaggaaagg caatttagaa acatcaaatg tgccacctat ccccacaatc ctagtcaggt
                                                                     840
ggatatggat ctgaggaagc agaaaagggt gggggcagcg ggtgagtgaa cagggaagag
                                                                     900
tactgagact gaggcgggga agtctctgca cgcgagggcc cagatggggc aacaaacctt
                                                                     960
atctcggtaa tggctttggg ttgtaagtgc attgggcgag accataccga ccctgttccc
                                                                     1020
ttaccettct gtagetgttg atatttetce actteteect gtagettett etggateage
                                                                    1080
tccgccatgg cggggatgaa agcctactgg gtgcgagaca agggcgctgg qtctcactct
                                                                    1140
ctggaaggta cctgagctcc cttttctgat ctggcctgcg gaaatgatag cactcttgag
                                                                    1200
aggtagecet gaggggeace geaacetece eccegteeg gatategact ceaecetgte
                                                                    1260
cccaggagat ggtgggcgaa acgcaagacc ccaagcctct caaccgaaat cctaacctac
                                                                    1320
tcacgttctt ccttcagtag taat
                                                                    1344
```

```
<210> 5858
<211> 1522
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (162)...(760)
<223> similar to gi5824504 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters-
```

```
<400> 5858
aaccccgccc cattatattt atcaccccc cccttcagcg gaatggggcc cccggcccc
                                                                       60
ccccacacac agttattctc taatttgtat ataaatttca cttttaagca ttttttttt
                                                                      120
ttttaagaaa taataataca ttttaatgca agagaaatca tagccctggt acacacccct
                                                                      180
tccccgatct gtcctgcctg gggatgtgtt tatggtgagt gtgtccccag gactggtagt
                                                                      240
cacctggctg teegggteec egecetactg geggeageat geetgteece ageattacat
                                                                      300
tcaactgctg ctctggctct cgagaggccg gctggcctcg ggcctccggc ttggcgttct
                                                                      360
ttgctcccct gtctccctgc taaggccagc agggccaaac tgctaggcca ggtcagccag
                                                                      420
ggctggggga atgggctgta ccctgctcct ccccaggcac gactgtcccc ccggggctcc
                                                                      480
atcaccgggt ggggcggagc gtctgctggg gcagctctgt gggccacagg atccccccqc
                                                                      540
acceactgea tetetetgee cagggtgeet geeteatagg atgeeeegeg ceacagagte
                                                                      600
tetetgeeca gggegeecge etcacagetg gteetegtee acceagatgg tettgegetg
                                                                      660
etectogoog atottgtoot tgacaacgog gagcagotoo totacgotgo cocacatgto
                                                                      720
aggttccacc gtggcgtaca ggcacggcag ggcctccagc tccttctcct tcagccggca
                                                                      780
cacgcgcagg aactcctcct ccgtctcagg tcggggcagc agctttctga acctcttgat
                                                                      840
gttcttctca cacacccgga tgaagagcac gatggggtag atgttggact tgatcaagtc
                                                                      900
tettgtgcag ecgateceag ecteeageag geagtgettg ttettggegg ecaeagette
                                                                      960
aatgttggca ggggcgatgc attcgaacgc gttggggttc ttctctcggg agtagatgat
                                                                     1020
ggtctccgtc ttctgccttc tgaggaactc atctcttgtg acgatatctg acttgcagat
                                                                     1080
ggtgaactcc atggcacctc ccgagttgag cagcctctgc accagcgtct tggccagcac
                                                                     1140
```

```
ggtggttgt aagagcacgg gccggcggcg ctcgcagtag aaggcgcgta ccaggctgta 1200 ggggatgagg ctgaggttct tgcccagctc gctctcaggg tccagctctt cctgcttctc 1260 agtcaagage ttggtggcgt ccagcgagga ccgggccagg ctccctagcg gactccccga 1320 gatgatgcgg acccgctcgt tgctgttcat ccgcttatac ttgttctcgg acctgctgac 1380 gaactgaagg agctggccaa aaaggaagct tgctcgcgag agacgggggc tgacccgggg 1440 gtcgcttgtt gaaagcgctt cttctggctg cagggtgttc cggagtgccc gcagggtgtg 1500 gtgggtgccg tctcctgcct cc 1522
```

```
<210> 5859
<211> 6155
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (97)...(6017)

<223> similar to gi4808813 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5859

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eccegggteg acceaegegt ccaaaagete cagaactgte teacteceag getacatett
                                                                       60
ctcacttgct aacaaggacc tctgagttca gcagccatga gttcagactc agaattggct
                                                                      120
gttttttgggg aggctgctcc tttcctccga aagtctgaaa gggagcgcat tgagqcccaq
                                                                      180
aataggccct ttgatgccaa aacatctgtc tttgtggcgg agcccaaaga atcctttgtc
                                                                      240
aaagggacca tccagagcag agaaggagga aaagtgacgg tgaagactga gggaggagcg
                                                                      300
actetgaeag tgaaggatga teaggtette eccatgaace eteccaaata tgacaagate
                                                                      360
gaggatatgg ccatgatgac tcatctgcat gagcctgctg tgctgtacaa cctcaaagaa
                                                                      420
cgttatgcag cctggatgat ctacacctat tcaggtctct tctgtgtcac tgtcaacccc
                                                                      480
tacaagtggc tgcctgtgta taagcccgag gtggtgacag cctaccgagg caaaaagcgc
                                                                      540
caggaggccc cgccccacat cttctccatc tctgacaacg cctatcagtt catgctgact
                                                                      600
gaccgagaga atcagtcaat cctgatcact ggagaatctg gtgcagggaa gactgtgaac
                                                                      660
accaagcgtg tcatccagta ctttgcaaca attgcagtta ctggtgagaa gaagaaggaa
                                                                      720
gaaattactt ctggcaaaat acaggggact ctggaagatc aaatcatcag tgccaacccc
                                                                      780
ctactggagg cctttggcaa cgccaagacc gtgaggaatg acaactcctc tcgctttggt
                                                                      840
aaattcatca gaatccactt tggcactact ggaaaactgg catctgctga tattgaaaca
                                                                      900
tatctgctag agaagtctag agttgttttc cagcttaagg ctgagagaag ttatcatatt
                                                                      960
ttttaccaga ttacatcgaa taagaaacca gaacttattg aaatgcttct gattaccacg
                                                                     1020
aacccatatg attacccatt tgtcagtcaa ggggagatca gtgtggccag catcgatgat
                                                                     1080
caggaagaac tgatggccac agatagtgct attgatattt tgggctttac taatgaagaa
                                                                     1140
aaggtctcca tttacaagct cacgggggct gtgatgcatt atgggaacct aaaatttaag
                                                                     1200
caaaagcagc gtgaggagca agcagagcca gatggcacag aagttgctga caaggcggcc
                                                                     1260
tacctccaga gtctgaactc tgcagatctg ctcaaagctc tctgctaccc cagggtcaag
                                                                     1320
gtcggcaatg agtatgtcac caaaggccag actgtagaac aggtgtccaa cgcagtaggt
                                                                     1380
gctctggcca aagccgtcta cgagaagatg ttcctgtgga tggttgcccg catcaaccag
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cagctggaca ccaagcagcc caggcagtac ttcatcgggg tcttggacat tgctgggttt
                                                                     1500
gagatttttg atttcaacag cctggagcag ctgtgcatca acttcaccaa tgagaaactg
                                                                     1560
caacagtttt tcaaccacca catgttcgtg ctggagcagg aggagtacaa gaaggaaggc
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atcgagtgga cgttcatcga cttcgggatg gacctggctg cctgcatcga gctcatcgag
                                                                     1680
aagcctatgg gcatcttctc catcctggaa gaggagtgca tgttccctaa ggcaacagac
                                                                     1740
acctccttca agaacaagct gtatgaccag cacctgggca agtctgccaa cttccaqaag
                                                                     1800
```

```
cccaaggtgg tcaaaggcaa ggccgaggcc cacttcgctc tgattcacta tgctggtgtt
                                                                     1860
gtggactaca acattactgg ctggctggag aagaacaagg accccctgaa tgagaccgtg
                                                                     1920
gttggactgt accagaagtc tgcaatgaaa actctagctc agctcttctc tggggctcaa
                                                                     1980
actgctgaag gagagggagc tggtggaggg gccaagaaag gtggtaagaa gaagggctct
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tctttccaga cagtgtctgc ccttttcaga gagaatttga acaagctgat gaccaacctc
                                                                     2100
aggagtaccc atcctcactt tgtgaggtgt atcatcccca atgagacaaa aactcctggt
                                                                     2160
gccatggagc atgagettgt cetecaceag etgaggtgta aeggtgtget ggaaggeate
                                                                     2220
cgcatctgta ggaaaggatt tccaagcaga atcctttatg cagacttcaa acagagatac
                                                                     2280
aaggtattaa atgcaagtgc aatccctgaa gggcaattca ttgatagcaa gaaggcctct
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gagaagctcc ttgcatccat cgacattgac cacacccagt ataaatttgg gcacaccaag
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cagctgatta cccgaaccca ggccaggtgc agagggttct tggcaagagt ggagtaccag
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cttgccaagt cagaggcaaa aaggaaggaa ctggaagaaa agatggtgac gctgttgaaa
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gaaaaaaatg acttgcagct ccaagttcag gctgaagccg aaggcttggc tgatgcagag
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gaaaggtgtg accagctaat caaaaccaaa atccagctag aagccaaaat caaagaggtg
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actgagagag ctgaggatga ggaagagatc aatgctgagc tgacagccaa gaagaggaaa
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ctggaggatg aatgttcaga actcaagaaa gacattgatg accttgagct gacactggcc
                                                                     3000
aaggttgaga aggagaaaca tgccacagaa aacaaggtga aaaacctcac agaagagatg
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gcaggtctgg atgaaaccat tgctaagctg accaaggaga agaaggctct ccaggaggcc
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caccagcaga ccctggatga cctgcaggca gaggaggaca aagtcaacac cctgaccaaa
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gctaaaatca aacttgaaca acaagtggat gatcttgaag ggtccttgga gcaagaaaag
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aaacttcgca tggacctaga aagggctaag aggaaacttg agggtgactt gaagttggcc
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caagaatcca taatggacat tgaaaatgag aaacagcaac ttgatgaaaa gctcaaaaag
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acctgctgcg ggaacagtat gaggaggagc aggaatccaa ggccgagctg cagagagcac
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tgtccaaggc caacaccgag gttgcccaat ggaggaccaa atacgagacg gacgccatcc
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agcgcacaga ggagctggag gaggccaaga agaagctggc ccagcggctg caggcagctg
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tgcagaatga ggtcgaggac ctcatgcttg atgtggagag gacaaatgcc gcctgtgccg
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cccttgacaa aaagcaaagg aacttcgata agatcctggc agaatggaaa cagaaatgtg
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aggaaacgca tgctgagctt gaggcctccc agaaggaggc ccgttccctt ggcactgagc
                                                                     4560
tgttcaagat aaagaatgcc tatgaggaat ctttggatca gctagaaacc ctgaagcgag
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agaacaaaaa cttacagcag gagatttctg acctcacgga acagattgca gaaggaggga
                                                                     4680
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gatgaggaaa ttgaccagat gaagagaaac cacagttaga atcgtgggag tccatgccag
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aagattggaa gggagacctc aatgaaatgg aaattccagc ttgaaccatg cccaaccgca
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tggcttgctt gaggcccctg aaggaactac aaggaacacc ccaaggcatc cctcaaggat
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accccagatt ccaccctgga ttgattgctc tccgggagcc aagggaggac cttqaaagga
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acagetggee atggtggage geagageeaa eetgetgeag gettgagate gaggagettg
                                                                     5220
```

```
cggggccact ctggaacaga caagagagga gcagaaaaat tcgcagaaca aggaaqctcc
                                                                     5280
tgggatgcca gtgagcgtgt ttcagctact tgcacaccca gaacaccagc cctgatcaac
                                                                     5340
accaagaaga agcttggaag acagatattt cccaaatgca aggagagatt ggaaggacat
                                                                     5400
tctccaagga agcccgcaat tgcagaagaa aaaggccaag aaggcactca ctgattgccg
                                                                     5460
ccatgatggc tgaggagctt gaagaaggag caggacacca qcqcccaacc atqqaqcqqa
                                                                     5520
ttgaagaaga acattggagc agaccgttga aggatcttgc agcttccqtc ttggattgag
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gcttgagcca gcctggccct tgaagggtgg gaaagaagca gatcccagaa acttggaggc
                                                                     5640
ccagggtacg ggaagcttgg aaggaagaag gtttgagaat tgagccaaaa gcgttaatgc
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ttaaggcttg tccaaaggtc ttgcgccaac attgagaggc cgagttgaag gaactcactt
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taccagaccg gaaggaagat agaaagaata ttctcaggct tcaagatttg gtagataaac
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ttcaggcaaa agtgaaatct tataagagac aagctgagga ggctgaggaa caatccaaca
                                                                     5880
ccaatctagc taaattccgc aagctccagc atgagctgga ggaggccgag gaacgggctg
                                                                     5940
acattgctga gtcccaggtg aacaaactgc gggtgaagag ccgggaggtt cacacaaaag
                                                                     6000
tcataagtga agagtgatca tgtcctgatg ccatggaatg actgaagaca ggcacaaaat
                                                                     6060
gtgacatett tggtcattte cetetgtaat tattgtgtat tetaceetgt tgcaaaggaa
                                                                     6120
ataaagcata gggtagtttg caaacaaaaa aaaaa
                                                                     6155
```

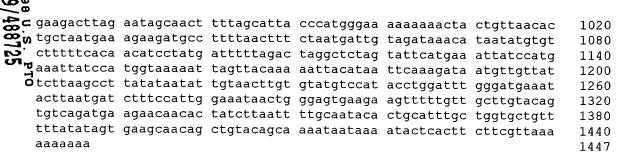
```
<210> 5860
<211> 1447
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(1448)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (498)...(887)
<223> similar to gi219671 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5860
tagtagaggc ggggtttcac catgttggcc aggctgagtc ttgcgcacgg gacctcaaga
                                                                       60
gatatgcctg cctcagcctc ccaaagtgct gggattacag gcgtgagtac tccgtgccca
                                                                      120
gtcaattttt gtatttttag tagagacggg gtttcaccat gttggtcagg ctggtctcaa
                                                                      180
acttctgacc tcatgatctg cccacctcgg cctcccaaag tgctgggatt gcaggcgtaa
                                                                      240
cacnccgcgc ccaagctaat ttttaaaaaat attttataga gacaggtctc actatgttgc
                                                                      300
ccaggctcgt cttgaacccc tgggcccagg cgctcctccc accttgacct cccaaaqttc
                                                                      360
tggaattaca catgtgagcc aacaccacg gcccagactg ggtaatttat aaagaaattt
                                                                      420
acttctgccc acaccggccc gcctccccgc ggcgagtggc tgaggcgtag cgctgccatc
                                                                      480
cccgcacccc tgggaacatg gcgctgcgag tggtgcggag cgtgcgggcc gtgctctgca
                                                                      540
gcctgcacgt ggtcctggca cctgccgcgc cctgcctatc gaggccctgg cagcttggga
                                                                      600
tgggcgccgt ctggttactg taatctgcct gaagttggga caaaattgaa caaacaaqat
                                                                      660
gagtttggtg ctttggagag tgtgaaagct gctagtgaac tctattctcc tttatcagga
                                                                      720
gaagtaaccg aaattaatga agctcttgca gaaaatccag gacttgtaaa caaatctcgt
                                                                      780
tatgaagatg gttggctgat caagatgaca ctgagtaacc cttcataact agatgaactt
                                                                      840
atgagtgaag aagcatatga gaaatacata aaatctattg aggagtgaaa atggaaccac
                                                                      900
taaataagct agtatgaaat aacgcaaccc agcagagttg tcctaaatta gtggtggata
                                                                      960
```

<210> 5861



```
<211> 1498
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (245)...(1285)
     <223> similar to gi1088448 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5861
tttcgtcaca taggcacaca gagatacgcg cacacacaca cacaaacgca ctcagatttc
                                                                       60
ccggaccctg gttttcctcc tgtgaccctt tcggggccgg gctctcaccc taaagaagca
                                                                      120
geocegocot ggggtggccc caccetetet tgggacetgt cataagtegg acceegggeg
                                                                      180
cccggctgcg cagtcccagc cgccttcccc aggcagtgga accttcgggc tcctgagctt
                                                                      240
caggatggtt cgtactaaga catggaccct gaagaagcac tttgttggct atcctactaa
                                                                      300
tagtgacttt gagttgaaga catctgagct cccaccctta aaaaatggag aggtcctgct
                                                                      360
tgaagctttg ttcctcaccg tggatcccta catgagagtg gcagccaaaa gattgaagga
                                                                      420
aggtgataca atgatgggc agcaagtggc caaagttgtg gaaagtaaaa atgtagccct
                                                                      480
accaaaagga actattgtac tggcttctcc aggctggaca acgcactcca tttctgatgg
                                                                      540
gaaagatctg gaaaagctgc tgacagagtg gccagacaca ataccactgt ctttggctct
                                                                      600
ggggacagtt ggcatgccag gcctgactgc ctactttggc ctacttgaaa tctgtggtgt
                                                                      660
gaagggtgga gaaacagtga tggttaatgc agcagctgga gctgtgggct cagtcgtggg
                                                                      720
gcagattgca aagctcaagg gctgcaaagt tgttggagca gtagggtctg atgaaaaggt
                                                                      780
tgcctacctt caaaagcttg gatttgatgt cgtctttaac tacaagacgg tagagtcttt
                                                                      840
ggaagaaacc ttgaagaaag cgtctcctga tggttatgat tgttattttg ataatgtagg
                                                                      900
tggagagttt tcaaacactg ttatcggcca gatgaagaaa tttggaagga ttgccatatg
                                                                      960
tggagccatc tctacatata acagaaccgg cccacttccc ccaggcccac ccccagagat
                                                                     1020
tggtatctat caggagcttc gcatggaagc ttttgtcgtc taccgctggc aaggagatgc
                                                                     1080
ccgccaaaaa gctctgaagg acttgctgaa atgggtctta gagcttccct actttgtaat
                                                                     1140
tgactgactt caagcaaata ctcttgtcta taaatccatg aagagtgcta agccatcact
                                                                     1200
ggaatacatt agcgaaaaac ttgtatcagg gtaaaatcca gtacaaggaa tatatcattg
                                                                     1260
aaggatttga aaacatgcca gctgcattta tgggaatgct gaaaggagat aatttgggga
                                                                     1320
agacaatagt gaaagcatga aaaagaggac acatggaatc tggaggccat ttagatgatt
                                                                     1380
agttaatttg tttttcacca tttagcaaaa atgtatacta ccttaaatgt cttaagaaat
                                                                     1440
agtactcata atgagtttga gctacttaat aaaatacatt taagtggtaa aaaaaaaa
                                                                     1498
```

```
<210> 5862
     <211> 1188
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1136)...(372)
     <223> similar to gi1813880 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5862
ttgagcccca agaggcagag gttgccgtga gccaagatca cqccactqca ctccagccag
                                                                       60
ggtggcagag cgaaaccttg tctcaaaaca acaacaaaaa agaagtaaac agctggtaaa
                                                                      120
gcaacctagc ctaaaactta caaagtagca gagtgaacac atatgtgcat gcacacacac
                                                                      180
acacacaca cacacataca cacagatgag agtagcacac acgccaaaga tacatcaagc
                                                                      240
aagtgctttt ttaatcaata catcaaatga tatttttgct agcctgagga agcttctctt
                                                                      300
tgcctgtcct atcattccca cccattgcct cacagggatg gaaagaaatt ccttcttgga
                                                                      360
cccaacatta gataaacata accaagtctt tacatgtggc tttggagaag gctgctagga
                                                                      420
tgcttgcgaa cacgacatcg ggggtctggg atgcatcgat ggcggagtgg atcccccgtt
                                                                      480
tcctgtagta cttctatgag tggggtgggt ttgagtgtgg gtagggcttg caggcgggat
                                                                      540
tttcaagggc ctttttcatt tatcatcttg atcgacggga tcaaggggtt ccccggttga
                                                                      600
ttgtcatctt ttcatggggg ctcttttggg aggggttgaa ctcctcgtgg gtagggaacg
                                                                      660
gccactcttt gggggtgaaa tcagccattt ctgcgtgcct cacagtccga gggaagccat
                                                                      720
ccagaagaaa accatttttg cacaaggggg tctccaaatt cttctcaatg agctccacta
                                                                      780
ccatttcatc actcaccagt ttcccagcat ccatagttgc cttcagcttt tttcctagct
                                                                      840
ctgagccaga agccaccatg gccctcagca tgtccccagt agctaaatgg cagacacaga
                                                                      900
agttttcagc caatctgggt gcctggggca gtagatagca gcagaaagag caggagcttt
                                                                      960
ggagtcattc agatgcaagc tctgtaaatt acttgctatg tagcctagag aacaagccat
                                                                     1020
tcaaacttca gtttctccaa ctgggtccct ttaccggccc cgggaggccc cagcagcacg
                                                                     1080
gcccggatgc ctttaggata ctcgggttct gccgctggca cgctgggagc catgtccgcc
                                                                     1140
gaagtctctc actgaacacc agttcgcacg cctcacaggt ccacgaaa
                                                                     1188
     <210> 5863
     <211> 2134
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (287)...(703)
```

<400> 5863

<223> similar to gi1890141 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters

```
qqaattcqqq tgaggctctc tcattccaga tatggagact aaaaagttca agatggaagt
                                                                       60
aatagcaaaa aaattacagt actaatcaca acagctacca tttctcagca ttagacacag
                                                                      120
taactgtatg aaagaagtat gattattagg tctgttttac agatgaggaa actgagaccc
                                                                      180
agaaaggtgg aagcacttgt ctaaggtcac gcctccagga agcagtgtgt ccacgactcc
                                                                      240
agtccaagtg gtcaggctcc agagcccaca gtcccagggg tccatgatgc cgagctgcaa
                                                                      300
tcgttcctgc agctgcagcc gcggccccag cgtggaggat ggcaagtggt atggggtccg
                                                                      360
ctcctacctg cacctcttct atgaggactg tgcaggcact gctctcagcg acgaccctga
                                                                      420
qqqacctccq gtcctgtgcc cccgccggcc ctggccctca ctgtgttgga agatcagcct
                                                                      480
gtcctcgggg accctgcttc tgattgctgg gtgtggcggc tctgaccact ggctatgcag
                                                                      540
tgccccccaa gctggagggc atcggtgagg gtgagttcct ggtgttggat cagcgggcag
                                                                      600
ccgactacaa ccaggccctg ggcacctgtc gcctggcagg cacagcgctc tgtgtggcag
                                                                      660
ctggagttct gctcgccatc tgcctcttct gggccatgat aggctggctg agccaggaca
                                                                     720
ccaaggcaga gcccttggac cccgaagccg acagccacgt ggaggtcttc ggggatgagc
                                                                     780
cagagcagca gttgtcaccc attttccgca atgccagtgg ccagtcatgg ttctcgccac
                                                                      840
ccgccagccc ctttgggcaa tcttctgtgc agactatcca gcccaagagg gactcctgag
                                                                     900
ctgcccacat ggcctaagat gtgggtcctg gatccttccc ccttctcacc ataaccccct
                                                                     960
ctcagtgttt ccccaacttc tcccttttag cagggtccct ttagagccca actccaggtc
                                                                     1020
aaatctqqag ctcaaatccc agtgctccct ccccaggagt ggggccccaa ctcttccaag
                                                                     1080
ataccagcat tecteaagte eteceaaaac tteetaceca caeeetette ecaaggeeet
                                                                     1140
caggggcaga aaacatctcc ttcaacccgt ccccactcct tcctctgcat gaccttgggc
                                                                    1200
aaacccttgc cctttcaagc catcagctcc tgcctctctg ccatgagggc tttggatcag
                                                                    1260
attectette tegecaggat gaggacaege actgecetee atagacaeag atgaaggggt
                                                                    1320
gggggtcatt cagctcgaat gggtcccaga tgctcacttg gcctttccct gcaggatgag
                                                                    1380
tgaagacgtt tgcctctcac agtgtgtctt ctacctgcat tttggcatca gagcccccca
                                                                    1440
gcccacccac cacaggcaat tactagccct agttgatagg tgaggtgggt gaagaaggct
                                                                    1500
ggaggtgaca tgtccgaggt cacacaacaa agcagcatgc aggaactaga aacacatctt
                                                                    1560
cagcetecte etgggecage tettgtgeta caggtgggge ggagecagee ceteacette
                                                                    1620
ctggttccct gagggtcctc agggtggagg acaggtttgg cccagaaaga ctagccagag
                                                                    1680
gcctgatggt cccaggtggc tctggatata ctttggatat ggatttaaat ggtctctaag
                                                                    1740
agccgggggt agggggcagg aaaagtgggt tgtctttgcc cctcaaagtc cacctaccta
                                                                    1800
gaaaccaagc ccacggtctt ggccgtgacc ctgataataa atgggctctc tcagaggcgc
                                                                    1860
cageceetee etececagee ggaggegtea tetetettet gtaceaetag agggagetet
                                                                    1920
gatgcagctg gagagcagcg ctcaaggctc tcgcccctcc cctccctaac ccttaccttc
                                                                    1980
agtetecace ageetgaagg geeteetagg ggateeteag geggeeeea ceagggeaca
                                                                    2040
ccctactgtc cttgtgcctc acgcccctc ctcatcctgc accccttcca tcccaccttc
                                                                    2100
cctttcaata aacagctggg atggaaaaaa aaaa
                                                                    2134
```

```
<210> 5864
<211> 1936
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1818)...(107)
<223> similar to gi4884092 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5864
tttttttttt ttgctagttg tatataaaat ttaatctcac cgaatgtaca gttttcaaat 60
```

```
ttcacgtgta tattaaggaa ctgatgcatc tgagcattgt caaacaaacg ggaagaagaa
                                                                      120
gttaaagggc agcctggcat tgatggctgg tggagctctg aagcctqcct ctgcaqqtqc
                                                                      180
agacacatcc acaaaagtaa ccgcagtgga aataagaatc gtcctttcat ttcctgagtt
                                                                      240
ggcctcagga aaggaggatg aaattagatt tgcagttaca ttgactattt tggcctgtgg
                                                                      300
attcagcagg gatccgtatt tagtccactt cacttctata accaaagccc ctgggagctg
                                                                      360
gcaggaatcc ttcctgttga atgactgggt gatgaagtgg atgggcaccc agtccagcat
                                                                      420
gtccctgggc cctgggaatt tccaaaaggg gccacgtaat ctgggaagcc ctggcccac
                                                                      480
agcaggetet teacettetg tgetacgage tgacaeggga gageteeagt eagtettagt
                                                                      540
ttacagccag attgcatagt gtaaccaaat aatactgggg tccggacccc ctccagtgct
                                                                      600
aagcagtctt gctcagttgt gctatgaaga atagtaagct gtccatatct atttgtggtc
                                                                      660
tgaataatcc cagacccctt atgaggctgg aatccagcag ctaatgggag ccccacgaca
                                                                      720
taaccagggt ttccactgag agggactggc tgggtatttt cctgaagaaa atgaatttca
                                                                      780
aacttttgct gcagtgggac cactacgctg ctaactqtcc ccaqaacqaa tqaqaqatca
                                                                      840
gctttggtga cttcacctgc atctgtgtat gtgaggctgt actttacctc aagaacaaca
                                                                      900
ttcacgcaaa ggctaaagtg tccagcgttg acgagagtcg gctgcagcac atcagtgtcc
                                                                      960
tcccgtcggg tgagcgtttt atttagagac tgaatgacga tggactgaac agtgataggg
                                                                     1020
accttttttc ttgaatcagg taccctcaga atttccgggc tgctgtaaaa agccatgctg
                                                                     1080
agggetteaa tttetteaca etgttetaaa tttattttte tqqtqcaett aacaqeetqq
                                                                     1140
ttcaccagaa acgctgcagg gttattatca gtgcacagag atgatgtcag ggacgaagga
                                                                     1200
aatctcagaa acgaatctga agtctgcaga ggaaccccat actcatattt agcagcagta
                                                                     1260
qqaatatcca qtttggttgt gaaggaaaca tatgattcag cattcaatgt aaaaccatca
                                                                     1320
gatgttttca tcaatgtatc aaaattgttt tcatcaggta cttctggatt aataaaggat
                                                                     1380
aatgcaggtt tatagtttgt aatatgaatg cagaaaatag atggattaat ctggtcaaca
                                                                     1440
agttcaaata ctctttgagg tgggtttgct gtaaaattca atgaatagat gactgctttt
                                                                     1500
tgactacaaa actggctgtc gcccgtgaca actggaactg agcaggcaga aaagacactg
                                                                     1560
aaatccacgg agctgcagtc gggatcacag cagcagttga tgtcacactg tgctggggat
                                                                     1620
aagtcacaga cacagagaac agcaacgtcc gtgactgggg taggcctggg gccggaggag
                                                                     1680
ggccctggag ccctgggagt cccggggggc ctggtcgacg ggaaagttcc gaaggtggcc
                                                                     1740
agggctgcct cggtggagtt gaggccctct gtcgtcaccg ccggggtggc atcggtctgg
                                                                     1800
gcgctcacgg aggcccagca gcccaggagc accaccagga gcgqcqqqaq acctcqcqqc
                                                                     1860
ctcatctccc agggagtccc agcgaggccc gcgacatgga cagcgcgttg cccggcaacc
                                                                     1920
gcgacagcca ggcgcg
                                                                     1936
```

```
<210> 5865
<211> 2697
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (402)...(2303)
<223> similar to gi4886493 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5865

caaggtgcgg cgggtagtgt actcattcga aggagaatac ccccaattca ctagacgagc 60
ccctaattgg gggtgcggtg ccgggcgcgc tctttcctcc ccctttccac cagcactgcc 120
ctcagttctg cttctagcca cgccctttcg cgttcacgtc cagcgccctg gcgggattga 180
tttgaggacg actggactgc cattgcgcct gcgcagggag cccaaggcaa gagccgctag 240
gctgccctgc ccgaagggct caactgtcag tgagcctgcg caggaggcca ataggctqcc 300
```

```
aatacteett ggaeteeeeg eeagggeeet getgteagtg egeetgegeg egggteegge
                                                                      360
gccgaggttc ttgactgctg tgccggacgc caggtgtagc catgcagcga gccgattccg
                                                                      420
agcagecete caagegteee egttgegatg acagecegag aaceceetea aacacecett
                                                                      480
ccgcagaggc agactggtcc ccgggcctgg aactccatcc cgactacaag acatggggtc
                                                                      540
cggagcaggt gtgctccttc ctcaggcgcg gtggctttga agagccggtg ctgctgaaga
                                                                      600
acatccgaga aaatgaaatc acaggcgcat tactgccttg tcttgatgag tctcgttttg
                                                                      660
aaaatcttgg agtaagttcc ttgggggaga ggaagaagct gcttagttat atccagcgat
                                                                      720
tggttcaaat ccacgttgat acaatgaagg taattaatga tcctatccat ggccacattg
                                                                      780
agetecacee tetectegte egaateattg atacacetea attteaaegt ettegataca
                                                                      840
tcaaacagct gggaggtggt tactatgttt ttccaggagc ttcacacaat cgatttgagc
                                                                      900
atagtetagg ggtggggtat etageaggat gtetagttea egeaetgggt gaaaaacaae
                                                                      960
cagagetgea gataagtgaa egagatgtte tetgtgttea gattgetgga etttgteatg
                                                                     1020
atctcggtca tgggccattt tctcacatgt ttgatggacg atttattcca cttgctcgcc
                                                                     1080
cggaggtgaa atggacgcat gaacaaggct cagttatgat gtttgagcac cttattaatt
                                                                     1140
ctaatggaat taagcctgtc atggaacaat atggtctcat ccctgaagaa gatatttgct
                                                                     1200
ttataaagga acaaattgta ggaccacttg aatcacctgt cgaagattca ttgtggccat
                                                                     1260
ataaagggcg tcctgaaaac aaaagcttcc tttatgagat agtatctaat aaaagaaatg
                                                                     1320
gcattgatgt ggacaaatgg gattattttg ccaqqqactq ccatcatctt ggaatccaaa
                                                                     1380
ataattttga ttacaagcgc tttattaagt ttgcccgtgt ctgtgaagta gacaatgagt
                                                                     1440
tgcgtatttg tgctagagat aaggaagttg gaaatctgta tgacatgttc cacactcgca
                                                                     1500
actctttaca ccgtagagct tatcaacaca aagttggcaa cattattgat acaatgatta
                                                                     1560
cagatgettt ceteaaagea gatgaetaea tagagattae aggtgetgga ggaaaaaagt
                                                                     1620
atcgcatttc tacagcaatt gacgacatgg aagcctatac taagctgaca gataacattt
                                                                     1680
ttctggagat tttatactct actgatccca aattgaaaga cgcacgagag attttaaaac
                                                                     1740
aaattgaata ccgtaatcta ttcaagtatg tgggtgagac gcagccaaca ggacaaataa
                                                                     1800
agattaaaag ggaggactat gaatctcttc caaaagaggt tgccagtgct aaacccaaag
                                                                     1860
tattgctaga cgtgaaactg aaggctgaag attttatagt ggatgttatc aacatggatt
                                                                     1920
atggaatgca agaaaagaat ccaattgatc atgttagctt ctattgtaag actgcccca
                                                                     1980
acagagcaat caggattact aaaaaccagg tttcacaact tctgccaaga gaaatttgca
                                                                     2040
gagcaggctg attcgagtat attgtaagaa ggtggacaga aagagtttgt atgccggcaa
                                                                     2100
gacaatattt tgttcagtgg gtgtgcagac aggaaatttc acccaagccg caggatgggc
                                                                     2160
gatgttatta gcccccaact ccataacacc ctcaaaaaaa gggatgggaa cgacagtacc
                                                                     2220
ttcagtccca aaatcccaac tcgcctcccg aggaggcttc ccaaaagcag agtcccagct
                                                                     2280
ttttaaagat gacccaatgt gaatgtctgt agtcagttgt ttacaaactc cctctcctgc
                                                                     2340
acaattcatt tagaggcttc aatcataaaa ttctgcaaaa taatgacaac tcatgcttta
                                                                     2400
attttgtatt ttgaatgtac acgcatgctg aagctaagta acttttaatc aaagaaataa
                                                                     2460
gatggtatta gggcaaatct tactatacta tgaaaagcat taccttgcct atttttaata
                                                                     2520
ttattaaagc ctttctcctt caaaaaaaaa aaaaagggcg gggcgcttaa aagatccctc
                                                                     2580
aggggggcca aaataacccc gagacgccca gctgtaagct tttcccttat gagggcctaa
                                                                     2640
ttataaacca aacttggacc cttttggaaa ggaccttaac ttcgggggag cacaaaa
                                                                     2697
```

```
<210> 5866

<211> 3464

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(3465)

<223> n = a,t,c or g

<220>

<221> misc_feature
```

<222> (1430)...(3052) <223> similar to gi4773880 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5866 atgcagtggt cagtgataat ggaatacttg aaagtaatcc cctcactcca ggaactagtg 60 ctcagctagc agaactaata gccctcactt gggcactaga attaggagaa gaaaaaaggg 120 caaatatata tacagactct aaatatgctt acctagtcct ccatgcccat gcagcaatat 180 ggaaagaaag ggaattccta acttctgaga gaacacctat caaacatcag gaagccatta 240 ggaaattatt attggctgta cagaaaccta aagaggtggc agtcttacac tgccgggqtc 300 atcanaaagg aaaggaaagg gaaaatactt ttgcctgcaa ctatccaatg gaaattactt 360 aaaacccttc atcaaacctt tcacttaggc atcgatagca cccatcaaat ggccaaatca 420 ttatttactg gaccaggcct tttcaaaact atcaagcaaa tattcagggc ctgtgaattg 480 tgccaaaaaa ataatcccct gcctcatcgc caagctcctt caggaaaaca aaaaacaggc 540 cattaccctg aaaaaaactg gcaactgatt ttacccacaa gcccaaacct cagggatttc 600 agtatctact agtctgggta aatactttca cgggttgggc aaaggccttc ccctgtagga 660 cagaaaaggc ccaagaggta ataaaggcac tagttcatga aataattccc agattcggac 720 ttccccgagg cttacagagt gacaatagcc ctgctttcca ggccacagta acccagggag 780 tatcccaggc gttaggtata cgatatcact tacactgcgc ctgaaggcca cagtcctcag 840 ggaaggtcga gaaaatgaat gaaatactca aaggacatct aaaaaaqcaa acccaqqaaa 900 cccacctcac atggcctgct ctgttgccta tagccttaaa aagaatctgc aactttcccc 960 aaaaagcagg acttagccca tacgaaatgc tgtatggaag gcccttcata accaatgacc 1020 ttgtgcttga cccaagacag ccaacttagt tgcagacatc acctccttag ccaaatatca 1080 acaagttctt aaaacattac aaggaaccta tccctgagaa gagggaaaag aactattcca 1140 cccttgtgac atggtattag tcaagtccct tctctctaat tccccatccc taggatacat 1200 1260 tggctggagt ggtcttggat acatcacact tgagtcaaat cctggatact qccaaaggaa 1320 cctgaaaatc caggagacaa cgctagctat tcctgtgaac ctctagagga tttgcgcctg 1380 ctcttcaaac aacaaccagg aggaaagtaa ctaaaatcat aaatccccca tggccctccc 1440 ttatcatatt tttctcttta ctgttctttt accctctttc actcteactg cacccctcc 1500 atgccgctgt atgaccagta gctcccctta ccaagagttt ctatggagaa tgcagcgtcc 1560 cqqaaatatt gatgccccat cgtataggag tctttctaag ggaaccccca ccttcactgc 1620 ccacacccat atgccccgca actgctatca ctctgccact ctttgcatgc atgcaaatac 1680 tcattattgg acaggaaaaa tgattaatcc tagttgtcct ggaggacttg gagtcactgt 1740 ctgtcggact tacttcaccc aaactggtat gtctgatggg ggtggagttc aagatcaggc 1800 aagagaaaaa catgtaaaag aagcaatctc ccaactgacc cggggacata gcaccctag 1860 cccctacaaa ggactagttc tctcaaaact acatgaaacc ctccgtaccc atactcgcct 1920 ggtaagccta tttaatacca ccctcactgg gctccatgag gtctcggccc aaaaccctac 1980 taactgttgg atatgcctcc ccctgaactt caggccatat gtttcaatcc ctgtacctga 2040 acaatggaac aacttcagca cagaaataaa caccacttcc qttttaqtaq qacctcttqt 2100 ttccaatctg gaaataaccc atacctcaaa cctcacctgt gtaaaattta gcaatactac 2160 atacacaacc aacteccaat geateaggtg ggtaacteet cecacacaaa tagtetgeet 2220 accctcagga atattttttg tctgtggtac ctcagcctat cgttgtttga atggctcttc 2280 agaatetatg tgetteetet eattettagt geeeectatg accatetaca etgaacaaga 2340 tttatacagt tatgtcaata tcctaaagcc cccgcaacaa aagagtaccc attcttcctt 2400 ttqttattgg agcaggagta ctaggcggac taggtactgg cattggcggt attacaacct 2460 ctactcagtt ctaccacaaa ctatctcaag aactaaatgg tgacatggaa caggtcgccc 2520 gactcccctg gtcaccttgc aagatcaact taactcccta gcagcagtag tccttcaaaa 2580 tcgaagagct ttagacttgc taaccgctga aagaggggga acctgtttac ttttagggga 2640 agaatgetgt taetatgtta ateaateegg aategteaet gagaaagtta aagaaatteg 2700 agatcgaata caacgtagag cagaggagct tcgaaacact ggaccctggg gcctcctcag 2760 ccaatggatg ccctggattc tccccttctt aggacctcta gcagctataa tattgctact 2820 cctctttgga ccctgtatct ttaacctcct tgttaacttt gtctcttcca gaatcgaagc 2880 tgtaaaacta caaatggagc ccaagatgca gtccaagact aagatctacc gcagacccct 2940

```
ggaccggcct gctagcccac gatctgatgt taatgacatc aaaggcaccc ctcctgagga
                                                                     3000
aatctcagct gcacaacctc tactacgccc caattcagca ggaagcagtt agagcggtcg
                                                                     3060
tcggccaacc tccccaacag cacttaggtt ttcctgttga gatgggggac tgagagacag
                                                                     3120
qactagctgg atttccttag gctgacctaa ggantcccta aagccttagc tggggaaggg
                                                                     3180
tggaccacat ccaccttttt aaaacacggg gggctttgca actttaggtt cacaccttga
                                                                     3240
ccaatcagag agctcactaa aatgcctaat taggcaaaga caggaggtaa agaaatagcc
                                                                     3300
aatcatctat tgcctgagag cacagcagga gggacaatga tcgggatata aacccaagtc
                                                                     3360
ttcgaagcgg caacggcaac cccctttggg tcccctcct ttgtatggga gctctgtttt
                                                                     3420
catgctattt cactctatta aatcttgcaa ctgcaaaaaa aaaa
                                                                     3464
```

```
<210> 5867
<211> 7104
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (90)...(5251)

<223> similar to gi4096591 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5867 tttcgtccgg gcttgaggtt gaattaagaa tagtcaggtg gtgagtggaa cgtctcttgg 60 ggtgtcggaa ttcaaaacgg acctggagga tgttgatctc caagaacatg ccctggcggc 120 ggctgcaggg catttccttc gggatgtatt cggctgaaga gctcaagaaa ttaagtgtta 180 aatccattac gaaccctcga tacctggaca gcctggggaa cccatcggca aacggcctgt 240 acgatttagc tttgggccct gcagattcca aagaggtgtg ctccacctgc gtgcaggact 300 tcagcaactg ttctgggcac ctgggccaca ttgagctccc actcacagtg tataaccctc 360 tcctcttcga taagctgtac ctgctgcttc ggggctcttg tttaaactgc cacatgctga 420 cttgtccccg ggccgtgatt cacctcttac tctgccagct gagggttctg gaagtcgggg 480 ccctacaagc agtctacgag cttgagagaa ttctgagcag gtttctggaa gaaaatgccg 540 atccctctgc ctctgaaatt cgggaggaat tagaacaata cacaactgaa attgtgcaga 600 acaacctcct ggggtcccag ggcgcacatg taaagaacgt gtgtgagagc aagagcaagc 660 tcattgctct cttctggaag gcacatatga atgctaagcg ctgtccccac tgcaagaccg 720 ggcgatccgt tgtccgaaag gaacacaaca gcaagttgac tatcacattt ccagccatgg 780 tgcacaggac agctggccag aaggactctg agcccctggg aattgaggaa gctcagatag 840 gaaaacgagg atacttaaca cccaccagtg cccgcgaaca cctttctgcc ctgtggaaga 900 atgaaggatt ctttctgaac taccttttt cgggaatgga tgatgatggt atggaatcca 960 gattcaatcc cagtgtgttc tttctagatt tcttggtggt gccgccctca aggtctcqcc 1020 cagtcagtcg cctaggagac cagatgttta ctaatggcca gacggtgaac ttgcaggctg 1080 tcatgaagga tgtagttctg attcgaaaac ttctggcatt gatggcccaa gaacagaagt 1140 tgccagagga agtggccaca cccactacag atgaggaaaa agactctttg attgctattg 1200 accgatectt tttgagtaca ettecaggee agteceteat agacaaactt tacaacattt 1260 ggattcgcct tcagagccac gtcaatattg tgtttgatag cgagatggac aaactaatga 1320 tggacaagta cccaggcatt aggcagatcc tggagaagaa agaaggcctg ttccgaaaac 1380 acatgatggg aaagcgagtg gactacgctg cgcgctcagt catctgccca gacatgtaca 1440 tcaacaccaa cgaaattgga attcccatgg tgtttgccac aaaactgacc tacccacagc 1500 cagttacccc atggaatgtt caggaactta ggcaagcggt catcaacggc cctaatgtgc 1560 acccaggage etccatggte atcaatgagg acggeageeg cacageeetg agegetgtgg 1620 acatgaccca gcgagaggcc gtggccaagc agcttctgac cccaqccacq qqqqcaccta 1680

agccccaggg gacaaaaatt gtgtgccggc atgtgaagaa tggggacatt ctgctactga 1740 accgacagee cacaetgeae agaeeeteea tecaggeeea eegtgeeege ateetgeetg 1800 aagagaaagt gctgcggctc cactatgcca actgcaaggc ctataatqcc qactttqatq 1860 gagacgagat gaatgcccat ttcccccaga gtgagctggg ccgggccgag gcctacgtcc 1920 tggcctgcac tgatcagcag taccttgttc ccaaggatgg ccaaccattg gcgggactga 1980 tccaggatca catggtttca ggggcaagca tgactactcg gggttgcttt ttcacccggg 2040 agcactatat ggagctggtg taccgaggac tcacggacaa agtggggcgc gtgaagctcc 2100 tttctccttc catcctgaag ccctttccgc tgtggacagg aaaacaggtt gtgtcaacgc 2160 tgotoataaa tataatooca gaggaccaca toocactgaa ottatotgga aaggogaaaa 2220 tcactgggaa agcctgggtg aaggaaactc ctcgatccgt tcctggcttt aaccctgact 2280 cgatgtgcga gtcccaggtg atcatcaggg aaggggagct gctctgcgga gtgctggaca 2340 aggcgcacta tgggagctcc gcctacggcc tggtccactg ctgctatgag atctatggag 2400 gcgagaccag cggcaaggtt ctaacctgcc tggcccgcct cttcaccgcc tacctgcagc 2460 tctacagagg cttcaccttg ggcgtggaag acattttggt gaagccaaag gcagatgtca 2520 agaggcaacg tatcattgaa gaatccaccc actgcgggcc ccaggctgtc agggctgcat 2580 taaacctgcc agaagccgca tcatatgatg aggtccgagg aaaatggcag gatgcccatc 2640 tgggcaagga ccagagggat tttaacatga ttgatctgaa gttcaaggag gaagtgaacc 2700 attacagcaa tgagattaac aaggcatgca tgccttttgg cctacacaga cagttcccag 2760 agaacacgct gcagctgatg gtgcagtcgg gagccaaagg ttcaactgtg aacacgatgc 2820 agatctcgtg cctgctgggc cagattgaac tggaaggtcg gagcaccccg ctgatggcgt 2880 etggcaagte actgccetge tttgagcett atgagtteae eeccaggget ggtggetttg 2940 tcactggcag gttcctcacc ggcatcaaac ctcctgagtt cttcttccac tgcatggcag 3000 gacgagaggg cctggtggac actgctgtga aaaccagccg ctcaggctat ctccaaaggt 3060 gcatcatcaa gcacctagag gggctggtcg tgcagtatga tctcacggtc cgtgacagtg 3120 acggcagtgt ggtgcagttc ctgtatgggg aggatggcct ggacatcccc aagacacagt 3180 tcctgcagcc caagcagttc cccttcctgg ccagcaacta cgaggtgata atgaaatcac 3240 agcatctcca tgaagtttta tccagagcag atcccaaaaa agctctccac cacttcagag 3300 ctatcaaaaa atggcaaagc aagcacccca acaccctgct gagaagaggc gccttcttga 3360 gttattccca gaaaattcag gaagctgtga aagccctgaa acttgagagt gaaaaccgca 3420 atggccgcag ccctgggact caggagatgc tgaggatgtg gtatgagttg gatgaggaaa 3480 gccgaaggaa ataccagaag aaggcggccg cttgtcctga ccccagtctg tctgtctggc 3540 gtcctgacat ctactttgca tcagtgtcag aaacatttga aacaaaggtt gatgactaca 3600 gtcaagagtg ggcagctcaa acagagaaga gttatgagaa atcagagctt tctctcgaca 3660 ggttgaggac cttgctgcag ctagaagtgg cagcgctcac tgtgtgagcc gggcgaggct 3720 gtgggcctgc tggctgccca gagcatcgga gagccctcca cccagatgac cctcaacacc 3780 ttccactttg caggcagagg cgagatgaac gtcaccctgg gcattccaag gttgcgggag 3840 attctcatgg tggccagcgc caacatcaag acacccatga tgagcgtgcc cgtgctcaac 3900 accaagaaag ccctgaagag agtgaaaagc ctgaagaagc aactcaccag ggtgtgcttg 3960 ggggaggtgt tgcagaaaat tgacgtccag gagtccttct gtatggaaga aaaacagaac 4020 aaattccagg tgtaccagct gcggtttcag ttcctgccac atgcatatta ccagcaggag 4080 aagtgeetga gaeeegagga cateetgege tteatggaaa caagattett taaaettetg 4140 atggaatcca tcaaaaagaa gaataataaa gcatcagctt tcaggaacgt aaacactcga 4200 agagctacac agcgggatct ggacaacgct ggggagttgg ggaggagtcg gggagagcag 4260 gagggtgatg aggaagagga ggggcacatt gtggatgctg aagctgagga gggagacgcc 4320 gatgcctctg atgccaaacg caaggagaag caggaggagg aggttgatta tgagagtgag 4380 gaagaggagg agagggaggg cgaggagaac gacgatgaag acatgcagga ggaacgaaat 4440 ccccacaggg aaggtgctcg aaagacccaa gagcaagatg aagaggtggg cttaggcact 4500 gaggaggacc cgtcccttcc cgccctcctg acgcagcccc ggaaacccac ccacagccag 4560 gagccccagg ggcccgaggc catggagcgc cgggtccagg ctgtgcgtga gatccacccg 4620 ttcatagatg actaccagta cgacaccgag gagagcctgt ggtgccaggt gacagtgaag 4680 ctccctctga tgaagatcaa ctttgacatg agctccctgg tagtatcttt ggcccatggt 4740 geegteatet atgegaceaa gggeateaet eggtgeetee tgaatgaaae aaceaacaat 4800 aagaacgaga aggagcttgt gctaaacaca gaaggaatca acctcccaga gctattcaag 4860 tatgcagagg teetggatet gegeegeete tactecaacg acatecaege catagecaae 4920 acgtatggca ttgaggccgc gctgcgggtg atcgagaagg agatcaagga tgtgtttgcc 4980 gtgtatggca tcgcggtcga ccctcgccat ctctccctgg ttgctgatta tatgtgcttc 5040 gagggtgttt acaagccact gaatcgcttt gggatccggt caaactcttc cccqctacag 5100

```
cagatgacat ttgaaaccag cttccagttt ctgaagcaag ccaccatgct gggatcccac
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gatgagctga ggtctccttc tgcctgcctt gtggtcggga aggtcgtcag gggcgggaca
                                                                     5220
ggcctgttcg agctcaagca gcctctgaga tagcagctac cccggcacca tctgcccagc
                                                                     5280
tccaaggacc cttggtgagg gcgtggccca gcctgccttc tgcatgagag gaccaggaga
                                                                     5340
ctggaatcca gggcagttcc aagtgacagt acagagcaca gcagcgacct tgggcctgaa
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agcagtgggc ctctgagctg ggccagcttc acctggaaag tgacagagtt gctcatcctt
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gcccctccct gtctctggat ttttatcaag gtttaccaag tcttctgagt ccccctgaga
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tggctggggc ctcacctgtg ctgcaggagg cctctgtggc ataaccccta aggagaagtc
                                                                     5580
ctgattcacg attcactgag aagaccaagg ggaagccatg ctttgctgct ggggacccca
                                                                     5640
ggcacctcca gagtagggaa gcggggttct tttgctgtga gtggccaggg acaacaqaca
                                                                     5700
agatteetgg gggeteeega tgageaggaa egtggageet getgeeeaag geetgeteet
                                                                     5760
tccggctgct ccagcccctg ggggcagagt ccacaaagag tccccatcaa gacttcttcc
                                                                     5820
ctgagtcaag tacagcgtag catagtcctc cacccaccca acctctctgc ctggccaggg
                                                                     5880
tcctggccct gccactgtgt ggcgaggtgt ccttctagac cacatcagcc ccaaggctgg
                                                                     5940
gagcagtcgc tccagggccg cagcagttca ctcccacaca tagaacccag gtcactgctg
                                                                     6000
gggcgattga acaggttgcc tggcttttct ctgctgtcag tttggtgtgg aggcctatgt
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tctgccccat acaccccaca ggccctgctt atgggaagga acacaggcct ccagcccaga
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ggactgtgcc gccctgttct tggccgtcca cgtttcctct ccctctagca ccagcaatac
                                                                     6180
atttccctgg catggacaga aaagacagag aggacttata caaaggtttt gtaaaaccag
                                                                     6240
aggctagctt ctatctttgt ctactgttat ttcagctcag ggcgggtaat taacatcatt
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ggaactagct attaggaaag aaaaaaact tggttttttt tacaacaatt ttttcccttg
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gtttgcagtt tctgcatttg gatttgagaa cccagggcgg ggattttctt ggcacagtca
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ggtcttgggt ccctcttcct gtgctttctt gtctgaggcc ttagggggaa gagctcagcc
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tetgcageet cetecacete tgcccetgge etgcetetge tgtgacetee ttccagaget
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agctgctggc cctgtggcca ggagaagcag aggggagaag cctttatgca gaagctgtgc
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tagccttggt ctggggtggg gaggctgctg ctgtgacctt aggggtaggg ttggggatca
                                                                     6660
agggaggctt tgtcaaggga gagtgaccat gttgctccct acatccatgc aataggaccc
                                                                     6720
agectgeace tectaggeet acaetgggga aageetgaca gaaateagta eeteetaacg
                                                                     6780
gggtctgcca ggttcaccaa ggcatgggca cagaggaata tgacagtttt gaggcaggca
                                                                     6840
ggaagggccc agcctgcagg gtaagacatt cattctttga gttaaaggcc atattcactt
                                                                     6900
gatgatttet acacacacta gaattgtgag agtgteettg aaggagatea caaagtaace
                                                                     6960
tggtgactgt ggcacagggt ccgtggattc catctctccc aggcactgag ggcgcagagg
                                                                     7020
cgaaggagca agccctgcat attggcaggg ctgtgaccat cgcacttaga tcagaccccc
                                                                     7080
gacctgtgtt gggatgtgag ggag
                                                                     7104
```

```
<210> 5868
<211> 5127
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (331)...(4654)
<223> similar to gi31958 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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<400> 5868
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```

```
cacgtgaaag acgatgtcag catttccgtt gaagaaggga aagagaatat tcttcatgtt
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tctgaaaatg tgatattcac agatgtgaat tctatacttc gctacttggc tagagttgca
                                                                      300
actacagetg ggttatatgg etetaatetg atggaacata etgagattga teaetggttg
                                                                      360
gagttcagtg ctacaaaatt atcttcatgt gattccttta cttctacaat taatgaactc
                                                                      420
aatcattgcc tgtctctgag aacatactta gttggaaact ccttgagttt agcagattta
                                                                      480
tgtgtttggg ccaccctaaa aggaaatgct gcctggcaag aacagttgaa acagaagaaa
                                                                      540
gctccagttc atgtaaaacg ttggtttggc tttcttgaag cccagcaggc cttccagtca
                                                                      600
gtaggtacca agtgggatgt ttcaacaacc aaagctcgag tggcacctga gaaaaagcaa
                                                                      660
gatgttggga aatttgttga gcttccaggt gcggagatgg gaaaggttac cgtcagattt
                                                                      720
cctccagagg ccagtggtta cttacacatt gggcatgcaa aagctgctct tctgaaccag
                                                                      780
cactaccagg ttaactttaa agggaaactg atcatgagat ttgatgacac aaatcctgaa
                                                                      840
aaagaaaagg aagattttga gaaggttatc ttggaagatg ttgcaatgtt gcatatcaaa
                                                                      900
ccagatcaat ttacttatac ttcggatcat tttgaaacta taatgaagta tgcagagaag
                                                                      960
ctaattcaag aagggaaggc ttatgtggat gatactcctg gtgaacagat caaagcagaa
                                                                     1020
cgtgagcaga ggatagaatc taaacataga aaaaacccta ttgagaagaa tctacaaatg
                                                                     1080
tgggaagaaa tgaaaaaagg gagccagttt ggtcactcct gttgtttgcg agcaaaaatt
                                                                     1140
gacatgagta gtaacaatgg atgcatgaga gatccaaccc tttatcgctg caaaattcaa
                                                                     1200
ccacatccaa gaactggaaa ttaataccaa tgttttatcc aacatatgat tttgcctgcc
                                                                     1260
ccatagttga cagcatcgaa ggtgttacac atgccctgag aacaacagaa taccatgaca
                                                                     1320
gagatgagca gttttactgg attattgaag ctttaggcat aagaaaacca tatatttggg
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aatatagtcg gctaaatctc aacaacacag tgctatccaa aagaaaactc acatggtttg
                                                                     1440
tcaatgaagg actagtagat ggatgggatg acccaagatt tcctacggtt cgtggtgtac
                                                                     1500
tgagaagagg gatgacagtt gaaggactga aacagtttat tgctgctcag ggctcctcac
                                                                     1560
gttcagtcgt gaacatggag tgggacaaaa tctgggcgtt taacaaaaag gttattgacc
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cagtggctcc acgatatgtt gcattactga agaaagaagt gatcccagtg aatgtacctg
                                                                     1680
aagctcagga ggagatgaaa gaagtagcca aacacccaaa gaatcctgag gttggcttga
                                                                     1740
agcctgtgtg gtatagtccc aaagttttca ttgaaggtgc tgatgcagag actttttcgg
                                                                     1800
agggtgagat ggttacattt ataaattggg gcaacctcaa cattacaaaa atacacaaaa
                                                                     1860
atgcagatgg aaaaatcata tctcttgatg caaagttgaa tttggaaaac aaagactaca
                                                                     1920
agaaaaccac taaggtcact tggcttgcag agactacaca tgctcttcct attccagtaa
                                                                     1980
tctgtgtcac ttatgagcac ttgatcacaa agccagtgct aggaaaagac gaggacttta
                                                                     2040
agcagtatgt caacaagaac agtaagcatg aagagctaat gctaggggat ccctgcctta
                                                                     2100
aggatttgaa aaaaggagat attatacaac tccagagaag aggattcttc atatgtgatc
                                                                     2160
aaccttatga acctgttagc ccatatagtt gcaaggaagc cccgtgtgtt ttgatataca
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ttcctgatgg gcacacaaag gaaatgccaa catcagggtc aaaggaaaag accaaagtag
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aagccacaaa aaatgagacc tctgctcctt ttaaggaaag accaacacct tctctgaata
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ataattgtac tacatctgag gattccttgg tcctttacaa tagagtggct gttcaaggag
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atgtggttcg tgaattaaaa gccaagaaag caccaaagga agatgtagat gcagctgtaa
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aacagctttt gtctttgaaa gctgaatata aggagaaaac tggccaggaa tataaacctg
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gaaaccctcc tgctgaaata ggacagaata tttcttctaa ttcctcagca agtattctgg
                                                                     2580
aaagtaaatc tctgtatgat gaagttgctg cacaagggga ggtggttcgt aagctaaaag
                                                                     2640
ctgaaaaatc ccctaaggct aaaataaatg aagctgtaga atgcttactg tccctgaagg
                                                                     2700
ctcagtataa agaaaaaact gggaaggagt acatacctgg tcagccccca ttatctcaaa
                                                                     2760
gttcggattc aagcccaacc agaaattctg aacctgctgg tttagaaaca ccagaagcga
                                                                     2820
aagtactttt tgacaaagta gcttctcaag gggaagtagt tcggaaactt aaaactgaaa
                                                                     2880
aagcccctaa ggatcaagta gatatagctg ttcaagaact ccttcagcta aaggcacagt
                                                                     2940
acaagtettt gataggagta gagtataage etgtgtegge eactggaget gaggacaaag
                                                                     3000
ataagaagaa gaaagaaaaa gaaaataaat ctgaaaagca gaataagcct cagaaacaaa
                                                                     3060
atgatggcca aaggaaagac ccttctaaaa accaaggagg tgggctctca tcaagtggag
                                                                     3120
caggagaagg gcaggggcct aagaaacaga ccaggttggg tcttgaggca aaaaaaagaa
                                                                     3180
gaaaatcttg ctgattggta ttctcaggtc atcacaaagt cagaaatgat tgaataccat
                                                                     3240
gacataagtg gctgttatat tcttcgtccc tgggcctatg ccatttggga agccatcaag
                                                                     3300
gacttttttg atgctgagat caagaaactt ggtgttgaaa actgctactt ccccatgttt
                                                                     3360
gtgtctcaaa gtgcattaga gaaagagaag actcatgttg ctgactttgc cccagaggtt
                                                                     3420
gcttgggtta caagatctgg caaaaccgag ctggcagaac caattgccat tcgtcctact
                                                                     3480
agtgaaacag taatgtatcc tgcatatgca aaatgggtac agtcacacag agacctgccc
                                                                     3540
atcaagctca atcagtggtg caatgtggtg cgttgggaat tcaagcatcc tcagcctttc
                                                                     3600
```

```
ctacgtactc gtgaatttct ttggcaggaa gggcacagtg cttttgctac catggaagag
                                                                     3660
gcagcggaag aggtcttgca gatacttgac ttatatgctc aggtatatga agaactcctg
                                                                     3720
gcaattcctg ttgttaaagg aagaaagacg gaaaaggaaa aatttgcagg aggagactat
                                                                     3780
acaactacaa tagaagcatt tatatctgct agtggaagag ctatccaggg aggaacatca
                                                                     3840
catcatttag ggcagaattt ttccaaaatg tttgaaatcg tttttgaaga tccaaagata
                                                                     3900
ccaggagaga agcaatttgc ctatcaaaac tcctggggcc tgacaactcg aactattggt
                                                                     3960
gttatgacca tggttcatgg ggacaacatg ggtttagtat taccaccccg tgtagcatgt
                                                                     4020
gttcaggtgg tgattattcc ttgtggcatt accaatgcac tttctgaaga agacaaagaa
                                                                     4080
gcgctgattg caaaatgcaa tgattatcga aggcgattac tcagtgttaa catccgcgtt
                                                                     4140
agagctgatt tacgagataa ttattctcca ggttggaaat tcaatcactg ggagctcaag
                                                                     4200
ggagttccca ttagacttga agttgggcca cgtgatatga agagctgtca gtttgtagcc
                                                                     4260
gtcagacgag atactggaga aaagctgaca gttgctgaaa atgaggcaga gactaaactt
                                                                     4320
caagctattt tggaagacat ccaggtcacc cttttcacaa gggcttctga agaccttaag
                                                                     4380
actcatatgg ttgtggctaa tacaatggaa gactttcaga agatactaga ttctggaaag
                                                                     4440
attgttcaga ttccattctg tggggaaatt gactgtgagg actggatcaa aaagaccact
                                                                     4500
gccagggatc aagatcttga acctggtgct ccatccatgg gagctaaaag cctttgcatc
                                                                     4560
cccttcaaac cactctgtga actgcagcct ggagccaaat gtgtctqtqq caaqaaccct
                                                                     4620
gccaagtact acaccttatt tggtcgcagc tactgaggga tgaacgaaag ccccctcttc
                                                                     4680
aactcctctc actttttaaa gcattgatat tagtatcttc tcagatacag accattttat
                                                                     4740
gattttttaa aaagtaaaag ttctaaaatg aagtcacaca agacaattat tcttatgcct
                                                                     4800
aagttaacag tggataaaag acttttctgt aaacaactcc agtaataaat atcatgaact
                                                                     4860
aatatggttt ttgtattcat ttgtttctga aaaatgtgca ttatgtacta tgaggaaatt
                                                                     4920
tctacaaaga gatgaagaca attgaaagcc agctatctgt tattgatcta agcactccca
                                                                     4980
acatgtctca gaccctgaac cgccagttat accctacact gataggtctc gaagcacttt
                                                                     5040
ctttccatag ctcctaatac agaatctgaa attggcctaa atctttctgg tttaaaaaca
                                                                     5100
aagcaaaccc acaaatggaa aaagcac
                                                                     5127
```

```
<210> 5869
<211> 1368
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (366)...(1222)
<223> similar to gi241467 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5869
agaaaccccc accccttctc cgtgtctcta ctcttttctc tqqqcttqct ccttcactat
                                                                       60
gggcaagctt ccaccttcca ttcctttctt ctcccttagc atgtattctt cagaacttaa
                                                                      120
aatctcttca attctcacct gacctaaaat ctaagcatct tattttcttc tgcaatgctg
                                                                      180
cttgacccca atataaactc gacaggagtt ccaaatagcc agaaaatggc acattcaatt
                                                                      240
tttccatcct acaagatcta aataattctt gtcgtaaaat ggcaaatggt ctgaggtgcc
                                                                      300
tgaagtccag gcattctttt acacatcagt cccttcctag tctctgtgcc cagtgcaact
                                                                      360
cgtcccaaat cttccttctt tccctcccgc ctgtcccctc agtcccaacc ccaagcgtca
                                                                      420
ctgagtcttt ctaatcttcc ttttctacag acccatctga cctctcccct cctccctggg
                                                                      480
ctgctcctcg ccgggctgag ctaggtccca attcttcctc agcctccact cctccaccct
                                                                      540
ataateettt tateacetee eeteeteaca eecegteegg tttacagttt catteegtga
                                                                      600
gtagecetee eecteetgee cageaattta etettaaaaa ggtggetgga getaaaggea
                                                                      660
```

<210> 5870 <211> 1553 <212> DNA

<213> Homo sapiens

```
tagtcaaggt taatgctcct ttttctttat cccaaatcag atagcgttta ggctcttttt
                                                                      720
catcaaatat aaaaatccag cccagttcat ggctcatttg gcagcaaccc tgagatgctt
                                                                      780
tacaqcccta gaccctaaaa ggtcaaaagg ccgtcttatt ctcaatatac attttattac
                                                                      840
ccaatctgct cccgacatta aataaaactc caaaaattaa attccggccc tcaaacccca
                                                                      900
caacaggatt taattaacct cgccttcaag gtgtacaata atagaaaaaa qtttcaattc
                                                                      960
cttgcctcca ctgtgagaca aaccccagcc acatcttcca gcacacaaga acttccaaac
                                                                     1020
ggctggaccg gcagcagcca ggcggttcct ccagaacctc ctcccacagg agcttgctac
                                                                     1080
acgtgccgga aatctgggca ctgggcaagg gaatgcccgc agcctgggat tcctcctaag
                                                                     1140
ccacgtccca tctgtgtggg accccactga aaatctgact gttcaacttc acctgggcag
                                                                     1200
ccactcccag agcccctgga actctggccc aaggctctct gactgactcc ttcccaqatc
                                                                     1260
ttgggcttag cagcttgaag actgacactg cccgatcgcc tcggaagccc cggagaccat
                                                                     1320
cacggacgcc gagctgccag taactctcac agtggaagct atctggtc
                                                                     1368
```

```
<220>
     <221> misc feature
     <222> (373)...(1306)
     <223> similar to gi2183323 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5870
egegteegeg gaegegtgga eggaegegtg ggegtetett ggeeegeget taaggeeete
                                                                       60
gcggggggct tgtgggtcct cctcccctc ccactgacaa ctgccccaac tgctcttccc
                                                                      120
gccccggtca cagtgaaaat gtagacgggg tcgttgtccg tacgactgtg cgccagggct
                                                                      180
cggggagggg cgccctccgc gtgagcgccc ccctqqqaat attqaacata atcacctctc
                                                                      240
attccagact atgttaggtc ttaatggtgg gaggacgccc gagtgctcgg cccgtttcac
                                                                      300
cccgaggagg aaggacactg ggtcatgacg ccatcagagg gcgccagagc agggaccgga
                                                                      360
egegagttgg agatgttgga etegetgttg geettgggeg geetggtget gettegggat
                                                                      420
tccgtggagt gggaggggcg cagtctcttg aaggcgcttg tcaagaaatc tgcactgtgt
                                                                      480
ggggagcaag tgcatatcct gggctgtqaa qtqaqcqaqq aaqaqtttcq tqaaqqtttt
                                                                      540
gactctgata tcaacaatcg gctggtttac catgacttct tcagagaccc tctcaactgg
                                                                      600
tcaaaaactg aggaggcctt tcctgggggg ccgctgggag ccttgagagc catgtgcaag
                                                                      660
aggacagate etgtteetgt caccattget etegatteae teagetgget getaettege
                                                                      720
ettecetgea ceacactetg ceaggteetg catgetgtga gecateagga etettgteet
                                                                      780
ggtgacagct cctcagtggg gaaagtgagt gtgctgggct tgctacatga agagcttcat
                                                                      840
ggaccaggcc ctgtgggagc tctcagcagc cttgctcaga ctgaggtgac cctgggcggt
                                                                      900
accatgggcc aggcctcggc ccacatcctg tgtcggaggc cccqacagcg cccaactgac
                                                                      960
cagactcagt ggttctccat ccttccggac ttcagcctgg atctccaaga ggggccctct
                                                                     1020
gtagagtece agecetaete egateeteat ataceeegg tatetaagaa tgecaaggee
                                                                     1080
agaacaagga aatgtagttt agtatctggt cacgggagag aaaataaaag ctgcagaggt
                                                                     1140
tgggggtggg gtcagggatt ctagggatgg ggcagagtgg cagcatcctt tgtacctaca
                                                                     1200
ggtggatccc acaactcatt tgacctttaa ccttcacctg tccaagaaag agagagaagc
                                                                     1260
cagagatage etgateetge cettecagtt cagttetgaa aagtaaggtt gggaeetggg
                                                                     1320
tacgtggatc cctgagtaga tcccagcatc tgggccatgg agaggttggg gcaacaggtt
                                                                     1380
```

1440

1500

attgattaac ctgactttat agggactgaa gtccacctcc agagacaagt ccaagttctt

gatccaccca ttccccctat aatggcagag gacctttatg tctcttttct ctcccttata

```
<210> 5871
<211> 1831
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1718)...(746)
<223> similar to gi5668733 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5871
ccatctcaaa attcttaatt ctatctgcaa agattctttt ccaaataaag taatatttat
                                                                       60
aggttctgag ggttagggca tgaacatatc ttttgagggc taccatttga tccatagctg
                                                                      120
ttcagcggtt tacattctcg gatttgacag tggcatgctt cacttgtgac tgtgccattc
                                                                      180
tggaatgagg ttgaccagat ggtgctgctg gccacgtcaa actcatccta caggctgtag
                                                                      240
caagcaagge teacacetee ecatgtetga cacetgtgaa teacagetgg gtetetggaa
                                                                      300
aaatgagtga gtgcaggaac aaaatcaaac aggagacctc atccaccact aggtctcaga
                                                                      360
gaggacattg cagcccctga aaagagagca tetetettgg aacttttgta etcagttgta
                                                                      420
ttaacgcggc aaggaaaatg gcacatttat gttggaaaat gtaattattt atggcacctg
                                                                      480
tgacaactgg gcactttgga atcacaaagt ttatggttga agaccacttg gggtgattat
                                                                      540
cctccaaaat gtttatttgg cttcttgaag ttctgcagag gttgaggcag ctgtctcaaa
                                                                      600
actagaggac agagccctgt gggcaggtgg gtgtgagaaa ctcaaacacc gcagtcttca
                                                                      660
cagacccaca agetattggc aggtgcaatg tgtttcttgg ggcagcagct atcctgagac
                                                                      720
aggatatcac agggtcacat caaggacccc agtcatctca caactcttag accacagctg
                                                                      780
ctgctgcagt ttctggttgt aggtgacgtg gagggacttg gtctctttct tgttgtatag
                                                                      840
gtaacggcca ccaactcctt ccagctctgg ggtgactgct gcgtagatgg aagtccacgc
                                                                      900
teetteateg ggggtettga aaageaacea geegagaage ttettegeea gaegggtgge
                                                                      960
ccagaacacg tgcttgtaga ggtccgtgtt gaccaccccg gggtccacca cgttggcggt
                                                                     1020
cacgtggctt ccctcagccg ccagcagccg ctggaggtgg taggtgaaca ggacaagggc
                                                                     1080
cagcttgctc tgggcgtagg ctgcgtgggg tgagtagcag qcactgctct gaaggtcatc
                                                                     1140
catgttcagc tcagcgacgt aatgggtggc agaggagacg gtgaccaccc tcgcactgtg
                                                                     1200
gccaggggac ccagactett teagegtate caagagaagg ttggteagea ggaagtgeee
                                                                     1260
taggtagttc aggccgaaat gttcttcgaa tccatctctg gttttcctct gagggaccat
                                                                     1320
catcacccca gcattgttga tcaggacatg gagaggaatc ttcttcatct tgaacttctg
                                                                     1380
cacaaactgc cggatggaag tcatggaagc caagtcacag tataaaaatt ccaaatttta
                                                                     1440
ggaggaaatg atggtgcacg cctgtagtcc cagctcctcg agaggctgag gtgggaggat
                                                                     1500
cgcttgagtt ccagaggcaa agccagcccg ggcaacacag caagactcac gtctctttgt
                                                                     1560
cgttcaaggt ttcttctttt attttgctta caacttgttt ggctttgctg tcattatttc
                                                                     1620
cagetatgat aacatgeatg ecaagteteg ecagatgett egetgtagaa tageeaatge
                                                                     1680
catctgtccc tcccgtcact atagcgacac ggtcaggtcg tgggggggaaa acctggggtg
                                                                     1740
ggtaggggte gaggteectg ggacgeecge tecteecte eggggeetgg eggggegeg
                                                                     1800
cggtcactgg ccgaccgcag gcggcaggca g
                                                                     1831
```

```
<210> 5872
     <211> 774
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (202)...(774)
     <223> similar to gi1389766 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5872
ggaggaaaca cacattaaaa ataaattaaa accttaatta tttaattaca agcgtgataa
                                                                       60
atgctaaaaa taggaggcac aggaaagcag gataacctat aattggagga aaacctgtct
                                                                      120
gggagatcaa gaaggcattc ccatacattg tcgtgacaac cttttttgga aggcaatact
                                                                      180
gaagtctatt aaatgacaca gctccttcga cctagctgtt ccactttagg aataaaagta
                                                                      240
atatagcaat aaaagtaata ctacttaaag cagcatgtgg ctttggctcc cagtgaagtt
                                                                      300
gcaggtgtta caaagcataa tatgcctcca agccaggctg cccaaaaggt caaatccaga
                                                                      360
aaccagtcta atagactgag gaaagcaagt gaaggtaact tgacacgcca taaagaactg
                                                                      420
ttcaagtgag tggactcatt gtgagatgcc tgatgcactc cagagaaatc agatttaggt
                                                                      480
ccaatagcat aatacaagaa gtcaagcacg tgagggcctc ctgtgagatc tcgatggggc
                                                                      540
agccaggcac ggggactcac gcctgtaatc tcagcattct gggaggccaa ggctggagga
                                                                      600
tcatttgagc ccaggagttc aagattagcc tgggcaatat ggtgaaaccc catttctaca
                                                                      660
aaaaaataca aaaaaaatta actgggtatg gtggtggtgt gtgcctgtag taccatctac
                                                                      720
tggtgggagc tgaggtagga ggatcacctg agcctggaag gttgaggctg taag
                                                                      774
     <210> 5873
     <211> 1322
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1116)...(203)
     <223> similar to gi311667 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5873
tttttttttt ttcacattac cgaaaggcca agtaatgtgg tgtgattact ataattccta
                                                                       60
caacaaaact tccacttaga atagttacat gttcccaaac tattttctt ctgtctgcca
                                                                      120
tgctggcttc tgtatcccat ggtccactgt aatctttttg gtcttctttt tttgcagtac
                                                                      180
agcagteete gtgetgetat ecattgagta ggtaaaceae caatteatag gtggeeatea
                                                                      240
taatggctgt gtttgggaat ctgtctcact agatgagttg tcagaccacg ataaagagac
                                                                      300
ccataacctt cttcttgaac aagcaaagat agagtctgaa aaaaagatct gtattttgtt
                                                                      360
ccctcttcac gtagtcttgt tcttacaact tcatgtggat atgctatagt tgtggcaaca
                                                                      420
agtttttgag gtggcagcag ctagcatcat tcccacaaaa tctgatgctt ctttcacaga
                                                                      480
ctcttcatca ttttccattg tagaagcagt cttatattcc agtagttttt gttttatact
                                                                      540
```

```
ttcataaata acaaaatgga taacagtctc tgatatacca gcatatgaag cagacatgcc
                                                                      600
cctataaaat ccttttagtc catctgtctg atacacttta cgaacacatt caaaagcacc
                                                                      660
cattcgcctt ttccccgcgg ttccttgcat caaagctgta accgagtctt tataagccaa
                                                                      720
atggggttgg ttgctgtgat tgcagtaaaa cctgccattg cagctgaaat catatgtact
                                                                      780
tgggtagaat caggatcaaa tacatcattc aacttttcct tgcagtttga ataagcagca
                                                                      840
aagtatattg ctctggaagg ggctaccccc actaaattgg ggcctagtcc tctaaacaag
                                                                      900
qaacgaggcc cttcttttc caagatcacc tttaggcaat qaagaggtcc gggagacact
                                                                      960
actoggttga cactggctoc agocatggtg ttoagotgaa ottoagaaat ataaagogto
                                                                     1020
acagaagatg actgcagtcg tgtttttaca acttccagtg gacatgtcag aatagctccc
                                                                     1080
actgtaccac cacatectee ggeaaacaga tgeaceageg tgteetetg geteattete
                                                                     1140
tetecegeat gteeteegge egetgaggeg ggaegeggat etggeegeee getaeggeag
                                                                     1200
gcggcttcgg tcccggactg gagacgcaca gcgccccggg gacggcgagg agagctggcc
                                                                    1260
gagatgcggc tgcagaaagc aaccggcaca gccctccccg cggcactcca gccqcqacqa
                                                                     1320
aa
                                                                     1322
```

```
<210> 5874
    <211> 1038
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (776)...(992)
    <223> similar to gi299471 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5874
tttcgtctcg gttagggcct catcgctctg ctcccgctcc ttagggaagc ctcggtgatt
                                                                    60
ctgccacage ctcagectet gtggetetgt gacetgeegg tattggatga ttcgtateta
                                                                   120
180
gctgtggagg cctcatcgga accggcggga aatggcggcg gtgggaggag tctgtgaatg
                                                                   240
gagtteeege teagecetet gteeteagte eeeteeggtg agggaeeege getettgtea
                                                                   300
gtccccgtac agcggctctg gcccagcctg cagccctcct tgtgcagctc tgcgccggta
                                                                   360
geoetgeact tteeceggge tgtggagtga gtaggagete ateeggaaga cacegeggeg
                                                                   420
gcctgcgcgg tgccggcgtg ggaggagctg tggtccggaa tcccgtccct actttaccct
                                                                   480
qttcaqaatq agattgaggc cccatcaaaa catggagttc atgtgagcaa acaggactta
                                                                   540
ttaatgggaa agctctgccg tggctcgtgg tttgggggact gccagcgggt cttgaaggaa
                                                                   600
aggettttgt gaggtgtgtg aggaagegaa geaaateaee tgeetgegee aaetttgeeg
                                                                   660
ecagteeect tgeeetgtge geeteeteeg egtggetgtt eetgaataeg etggtgtetg
                                                                   720
ttcgcatctt ttagaatacg ctggtgtcgg tgcgcacagc gcttctctta gttctacgga
                                                                   780
gtcttcgctg tgtcgccagg ctggagtgca gtagtgcgat ctcggctcac cgcattctcc
                                                                   840
acctcccagg ttcaagcgat tcacctgctc agcctcctga gtagttggga ttacaggcgc
                                                                   900
gccaccacac tcagctaatt ttttgtatt tttagtagag acggggtttc gccatgttgg
                                                                   960
ccaggatggt ctccatcttc tgacctcatg atccaccagc ctcggcctcc caaagtgctg
                                                                  1020
ggattatagg cgtgagcc
                                                                  1038
```

```
<210> 5875
<211> 1762
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1678)...(388)

<223> similar to gi23874 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5875 ttttttttta taaattcatg acacttttta ctatgcccca ttgcacgttc tcatccatgg 60 atttgccttg ccgttaagaa ttaattaacc atggccttgt ggccctgggc tgacccaggc 120 180 ctcctaatac catgtcatca agtgttcaca attttccaaa atgaagttga agtgccttga 240 tctgtccact gccaccacca accagtgctg gagttttccc atgtgggttt tgctttttgt 300 ggtgttaact ggcccttgct gctaagagca agcaaggact gttctgcgta agcgcctgcc 360 agcctgggga cctcactcaa gttccccagg ggtattcaaa gaccggcagc gggctcccat 420 tecagetece gatggeacat ggacaaceae teeggtatge eetetteeea egggegette 480 agetteattg ageaagegtg atgacetgta egtgeececa gtgeageeca agggggtgge 540 ectaagggee actggeacee eccagggggg tteaceette teagggggga agtegtaget 600 tctccacaca gtaggcagcc tggcttgcaa aggccctcat tgatctcgaa gatgtccacg 660 tcactcactg tcagccctgc tttttgcaaa gctactggga tggcataggc aggtccaatg 720 cccatgatgt caggtgggac cccaaccact gcataagacc tcaggacccc aaggatggga 780 aggcccaact cttctgcctt ggacctccgg gccagcagga tggcagctgc cccatcactc 840 acctggctag agtttccagc tgtggtagaa ccatctttct tgaaggcagg cttcagtttg 900 gccaggccct ccatggtggt gctggggcgg ataccctcat cctgggtcac agtgatgctc 960 ctcttggtgc ccttgtcatc atggaccgtg gtggtcacag gcacaatctc agcttggaaa 1020 cagcccttgc tctgggctct tgctgccttc tgctgggaag ccagggcaaa ggtatcctgc 1080 ttctcccgtg aaatgccaaa ccgctcagcc acattctcag aggttatccc cataggaatc 1140 aggcaatctc tggccttctc cttctccatc aagcgcgaag taatatttcc agggttccct 1200 ctgtcagcca gggacatgga ctccaccca caggccatgc caatgtcata agacccattt 1260 ctgatgccac ctgctatgct ggccactgcc tgtagccccg acgaacactg tctattgaca 1320 gtggacaaag gcacagtctc cgggatgtca ctcagaaact gggcgattcg ggccatgatt 1380 gccccggccc caggctgcag cacatttccg acacagatgt cccccagctg ttccggcctc 1440 agattcacgt ccttgagaac cgcggtcatg actgccgaga gaagctcgtc gggggtggtg 1500 teettgaage egeegeggee egeeeggeag atggeegtge geegeeegtg caccaccace 1560 acatccgcgg ccgaggcatg cggggcaccg ctcaggcaag gcgcggcctg cggcatccag 1620 ccggaatcgg ccggacccct caggtggccc agcactacct gcagcctctg cattgcgcag 1680 gtcaaccetg cagaccagce accagteegg gaactgaceg eggagttaac agacageegt 1740 ccgcacacgc gcagaaccac at 1762

```
<210> 5876
<211> 1140
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
```

```
<222> (1108)...(443)
<223> similar to gi4454696 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

```
<400> 5876
gggaggaaag ggaaggtatt agacgccgcg cggggattgg tttttgtgtg taattatggg
                                                                       60
atagggttgg tgagatggtt ttgggttggg agtggtgttg gtggttgttt atatgttttg
                                                                      120
gaggagtggg actccataag ccctttctgt aatataagta tgctaaatgc cacggaagcc
                                                                      180
agatacattt attaaatcta ctcttagcca agcaataaag atgtgtacag agttcacaac
                                                                      240
ctgcaacact tcaccaggga atgctaggta aaggcaactt cagtttaact gagtactcca
                                                                      300
tttcaagtgg gtaatgtctg ctggttggca gctatccagt ttggaaaact gtggaagatg
                                                                      360
ctqttgctac ccagattgtt ctgttcaaca agtgggcctg aagcctgagc agtgtagcca
                                                                      420
gctgtgtggg gagcagaggt tcactccatt gcttctgcag cctcctcacc tgactcctcc
                                                                      480
tectecteta gtaageaget tettgteaca gaettetgga tagetteeeg eteteettea
                                                                      540
tcagtgcagt tctgcaacaa gatcaacagc tgtctcctgt tgtactgaat taggaacttc
                                                                      600
tgacatgttc ttattgtacc tggcatatga gttactgtgg tcaacagctt gtgaaaggtc
                                                                      660
tegacettae agaettteag aggtaggggg aaggtettgt tagegggaea geageaagae
                                                                      720
ccacccacca gtttagactg aactgtgaac gtgtcaccaa ttgaaaatca gtagccatac
                                                                      780
cacctcactc ctacctccca catgtaatgt gttgaaaaag catgggtaac ggtgtccttt
                                                                      840
gttctccaag tatgtgatga agggaagagc tgaccacaca agctgataga attctttct
                                                                      900
gcatcgaagt agcactattc cagtataggc attgagatat cgaaccgcga agccgatgga
                                                                      960
gcaggcggct gcgccgaaag ttccgtgcac cctggcgatc gtgtcccgta cgaqqctqct
                                                                     1020
cagaactcgg tcatcgaggc ttaggcggca gcgggggtcg tcagacacca gttcgcagag
                                                                     1080
caggtacctg tgcttgaacc gcaccatggc tgcctccqcg ctctccagtc cqctcqtqcc
                                                                     1140
    <210> 5877
     <211> 2474
     <212> DNA
     <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(2475)
    <223> n = a,t,c or g
    <220>
    <221> misc feature
    <222> (405)...(2378)
    <223> similar to gi5305335 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5877
ttttttttt ttgcgaatct gttgatttat ttacggctcg gtgagacgac gctggacgct
                                                                       60
ggttagggta agggttaggg caagcattag cagcaggggc atggccctgg gaagcacctg
```

gaccccagaa cataagacag gagggagaga tgccatccat tcagcgggca cttatqccca

cgaccagctg agccagacca gcattcccat ttcaccaccc cttactcctc aagatgcaaa

tgaagctcag ggctgggcgg aagctggcag ggctgtccac agggaggacc cccgtgtgtc

120

180

240

300

```
tctcgggctg cccaggtggc tctgtccacc cttctgtctg ggaggctcct taaggctggg
                                                                      360
gagggcccag agggaaggag atcctgaggg gctggcagat tcaggccctc cctgcgaqct
                                                                      420
gaggtttgaa gaggagagca gaccacccag agtagtggga gaaagcaccg gcagaaaagc
                                                                      480
tgqcatatcc accgagggcc tctctgcttc ttttgacctt tttcagagtt tcagagttat
                                                                      540
gaaccaaatc gccttcatga gagatgacga atcagatgct acatagtggg ggaggcgca
                                                                      600
gctggcctgg ctccccact tccccaggac ctccgcctgg aggaagcctg cccagggccg
                                                                      660
caqccctgcc cccaaagacc ccaggacaga ccagagctcc tgctggagcc gggtgtcccc
                                                                      720
atgctgacct ggccatgtcc ccaggtccca ccccagggtc acttcctgta gctccqactt
                                                                      780
ctctagtggc tgattgcagt tcccagaatg tataacatcc cagggtgcca gagcccaccc
                                                                      840
aagcagccac tcctgtccag ttcccagaat gtataacatc ccagggtgcc agagcccgcc
                                                                      900
caagcagcca ctcctgtcca gttcccagaa tgtataacat cctagggtga cagagcccgc
                                                                      960
ccaagcagcc actcctgagt cactcgggca tgtccaggac tcaggtccac acaqacagtg
                                                                     1020
gcaacagcta gccctgggca tctaccccca tgaaggggac cctcggttct gcgagagaga
                                                                     1080
tccccgaagt gggaactggg cccccatggt gcccagtgcc tctcccctc tcctctgcca
                                                                     1140
ctctgccctg cacccagagg cagcgctgga ggccttactc taccactcag ggcttctcaa
                                                                     1200
acctctggtt ccacttttct ccttttaagc tttccatttt gtaaactcac ctccccttc
                                                                     1260
ccaggcttgg gggtccaagg aaccccagct ggtgggagaa gcgtctgcac tgtggtgcag
                                                                     1320
ggggtggtga gtgagcgagg aggcactagt gtggggcagc tacttcacct ccctqtqcct
                                                                     1380
ctgtgtcctc ctctgtcaaa ggggcaagat aatggctccc attgccgqqc tqctatacag
                                                                     1440
tgctcagggc cacagtgcag tggggggacc cacgtccatc gccaccttga tgcatacaac
                                                                     1500
ccggacaagt ttactgctgt gatttctgcc ggcgctgctg tgccggttcc ctggtgctgc
                                                                     1560
acagccacgc actccccatg agtgggcctg cccagcatta gctgagtgcc ttctgtgtgc
                                                                     1620
tetacgecag gtgecaaggg caggecagee aggeagaace atgtgtgggg etgggacagg
                                                                     1680
tcagggtggt ggaaaggtgg acagaaggag gcaggaggca ggtgtgagaa gctgcccacc
                                                                     1740
ccacccctca acaccacage acttccaget ccagcaggte cttgttctca getgeceetg
                                                                     1800
agccatgggt ggccaggtct cctccccatc accccactga gactcgagac agggaggacc
                                                                     1860
tgatcctgga gtccctccca gccctggctg aggaagccac ccaacccgac aatqqqcttq
                                                                     1920
cgcaagccgc gcagtgactg ctcccagcct ctcccaagga cttaggagcc caaagccgcc
                                                                     1980
teceteeegg tgageateee aaggeatege tggetgeage tgagagggee teatttggge
                                                                     2040
actgcncctg aggctggcac ttgcaggtgg gggcccttgg gagctctggg aggcacctgg
                                                                     2100
cagecteeca gacaceeegg geoggteetg etetecagge ttagggetae agecacaace
                                                                     2160
actgggggta ggggcgaggg gagtccaggc ccaccctgtg ctggcagcaa ctccttccca
                                                                     2220
gctctgggcc cagtatgatg cccatcttcc ctctggggag tcacgttcct cccgctccgg
                                                                     2280
gcccgttccc acccaaggtc cctttgcaga agactggcac tgtcctcctc caqcgggaac
                                                                     2340
tgggtgtgcc ctcagcaaga ctctgccccc tcccatcctc atgttctcag gagactgaag
                                                                     2400
ctgggcactc agaaccagcc ccaggagcag aacgcaggcc tgcatataga ctcactgcaa
                                                                     2460
ggcggacgcg tggg
                                                                     2474
```

```
<210> 5878
<211> 1938
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (48)...(1654)
<223> similar to gi1388193 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5878

```
ctattctgtc aaagagacgg tgccaaaagg caaaaacaaa ggagctgatg gcaaagaagg
                                                                       60
tagctgtgat tggagctggg gtcagtggcc taatttctct gaagtgctgt gtggatgagg
                                                                      120
gacttgagcc cacttgcttt gagagaactg aagatattgg aggagtgtgg aggttcaaag
                                                                      180
agaatgtgga agatggccga gcaagtatct atcaatctgt cgttaccaac accagcaaag
                                                                      240
aaatgtcctg tttcagtgac tttccaatgc ctgaagattt tccaaacttc ctgcataatt
                                                                      300
ctaaacttct ggaatatttc aggatttttg ctaaaaaatt tgatctgcta aaatatattc
                                                                      360
agttccagac aactgtcctt agtgtgagaa aatgtccaga tttctcatcc tctggccaat
                                                                      420
ggaaggttgt cactcagagc aacggcaagg agcagagtgc tqtctttqac qcaqttatqq
                                                                      480
tttgcagtgg ccaccacatt ctacctcata tcccactgaa gtcatttcca ggtatggaga
                                                                      540
ggttcaaagg ccaatatttc catagccgcc aatacaagca tccagatgga tttgagggaa
                                                                      600
aacgcatcct ggtgattgga atgggaaact tgggctcaga tattgctgtt gagctgagta
                                                                      660
agaatgctgc tcaggttttt atcagcacca ggcatggcac ctgggtcatg agccgtatct
                                                                      720
ctgaagatgg ctatccttgg gactcagtgt tccacacccg gtttcgttct atqctccqca
                                                                      780
atgtactgcc acgaacagct gtaaaatgga tgatagaaca acagatgaat cggtggttca
                                                                      840
accatgaaaa ttatggcctt gagcctcaaa acaaatacat tatgaaggaa cctgtactaa
                                                                      900
atgatgatgt cccaagtcgt ctactctgtg gagccatcaa ggtgaaatct acagtgaaag
                                                                      960
ageteacaga aaettetgee atetttgagg atggaacagt ggaggagaac attgatgtea
                                                                     1020
teatttttge aacaggatat agtttetett tteeetteet tqaaqattea etegttaaag
                                                                     1080
tagagaataa tatggtctca ctgtataaat acatattccc cgctcacctg gacaagtcaa
                                                                     1140
ecetegegtg cattggtete atceageece taggtteeat ttteecaact getgaactte
                                                                     1200
aagctcgttg ggtgacaaga gttttcaaag gcttgtgtag cctgccctca gagagaacta
                                                                     1260
tgatgatgga cattatcaaa aggaatgaaa aaagaattga cctgtttgga gaaagccaga
                                                                     1320
gccagacgtt gcagaccaat tatgttgact acttggacga gctcgcctta gagataggtg
                                                                     1380
cgaagccaga tttctgctct ctcttgttca aagatcctaa actggctgtg agactctatt
                                                                     1440
teggaeeetg caacteetat taatategee tggttgggee tgggcaatgg gaaggageea
                                                                     1500
gaaatgccat cttcacccag aaacaaagaa tactgaagcc actcaagact cgggccctga
                                                                     1560
aggattcatc taatttctca gtttcttttc tgttgaaaat cctgggcctt cttgctgttg
                                                                     1620
ttgtggcctt ttttttgcca acttcaatgg tcctagtcag cataatgctt tgggctttat
                                                                     1680
tatcttgtca gtcactacct cctaaagaaa aaaaaaaagg ctaaaaaaaa aaacattaca
                                                                     1740
ttcatgttct aattataaat tttaaagtta ggtactacag gcagggggga aattgtaaag
                                                                     1800
aattaccaaa attaggctta tgtacaaaac caaaatttgg ccatgaaatt ttgcctttcc
                                                                     1860
atgetteeet cagtteacea aagttaecaa aatgtaaaat aaaataaaae tggeteaggt
                                                                     1920
aagtagggct gccaaccc
                                                                     1938
```

```
<210> 5879
<211> 2789
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (438)...(1674)
<223> similar to gi36603 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5879
cccacgcgtc cggcgatgcc taagcggttc accttttagc caaggtcctc cagcgttcct 60
agagcggaga agaaagcgct ccgaagagct agagctgaca ctcggcgatg agctaagacg 120
ctgtttcaga gcgtttgggt cctctgaggc cccttgacca ggagtgtctc tgaagataca 180
gtccaaagaa agttctccaa aacaaggaga gcagtctgaa gctggggatg gcaacagcat 240
```

```
tggtgagtgc ccattccctg gctcccctga atctgaagaa ggaggggctt cgggtagtga
                                                                      300
gggaggatca ctactctact tgggaacagg gattcaagct gcaaggaaac agtaaaggcc
                                                                      360
ttggacagga gccattgtgc aaacaattca ggcagttgcg ttatgaagag accacaggac
                                                                      420
ctcgagaagc actaagtcgg ctccgggagc tctgtcaaca gtggctacag cccgagaccc
                                                                      480
ataccaagga gcacatcctg gagctgctgg tgctggagca gtttctgatc atcctgccta
                                                                      540
aggageteca ggeeegggtg caggageate acceagagag cagggaggae gtggttgttg
                                                                      600
ttctggagga tttgcagctg gatcttggag aaacaggaca acaggtggac ccagaccagc
                                                                      660
caaagaaaca aaaaatactt gtggaggaga tggcccctct gaaaggagta caggaacagc
                                                                      720
aggttcggca tgagtgtgaa gttacaaagc ctgagaaaga gaagggtgag gagacaagga
                                                                      780
ttgagaatgg gaagcttatt gtagtaacag actcttgtgg aagagtagag tcatctggga
                                                                      840
aaatatetga acceatggag geteataatg agggetetaa ettggaaagg cateaggeea
                                                                      900
agcccaaaga gaagattgag tataaatgct cagaacgtga gcagagattc atccagcact
                                                                      960
tggacctgat tgaacatgcg agtacacaca cgggaaagaa actctgcgag tctgatgtgt
                                                                     1020
gtcagagttc cagtcttaca ggacataaga aagtcctctc ttaggagaga aaggtcatcc
                                                                     1080
agtgttcatg gagttttggg gaaagccttt cagaggagtt cacacctcgt cagacatcag
                                                                     1140
aaaatccatc ttggtgagaa gccttatcag tgcaatgagt gtggcaaagt ctttagccag
                                                                     1200
aatgcaggcc ttttggaaca tctcagaatt catactggag agaaacctta tctatgtatc
                                                                     1260
cattgtggaa aaaattttag gcgcagctct caccttaatc qacatcagag aattcacagt
                                                                     1320
caggaggagc cctgtgagtg caaggagtgt ggaaaaacct ttagtcaggc cttactcctc
                                                                     1380
acccaccatc agagaatcca tagtcactcc aaaagccatc aatgtaacga gtgtggaaaa
                                                                     1440
gctttcagtt tgacctcaga ccttattcga caccacagaa ttcatactgg agaaaaacct
                                                                     1500
ttcaagtgta acatatgcca gaaagccttc cgactaaact cacaccttgc tcagcatgta
                                                                     1560
agaatccaca atgaagaaaa accctatcag tgtagtgaat gtggagaagc cttcaggcaa
                                                                     1620
aggtcaggtc tttttcaaca tcagagatat caccacaaag acaaactggc ttgatgaggt
                                                                     1680
gttctctcct tgtagaacat cagagaaggc acattgacta qcaaacaqca ctttaggaaa
                                                                     1740
agtcaccgta gcccactgtg gcatcagaaa attcttgggg gctgagttgg aggctccctg
                                                                     1800
cctctattct ctctcctttg ctttccttga agtcagcttt ggaccacaat aatttcactg
                                                                     1860
tagatgatat gctaggatca aagttaaaca gcattcttca ctgcaggaca tctcagagca
                                                                     1920
tgtaacataa ctgcatgatt atatactcta agcaatagag agcttcatga ctgagtaaga
                                                                     1980
gttttgaagt cagcagtgaa tcaagtgccc acagatttgc aggcttaagc agaacaaggg
                                                                     2040
aagattgata tttttggata tgctatagca gctttctcct atgaaataaa actgatgatg
                                                                     2100
tttggaagta tactactctc aaaggtgtct ttaaagtaca ggttaatggt gaacattttc
                                                                     2160
ccccagtggc ttcacctcat tcctcccact ggccttaccc cttccttccc cagtggaagc
                                                                     2220
attttcaaaa gcaaagataa ttttcgctgg tgaacttcag aacttgcctt cagggttagc
                                                                     2280
ttcatgtaat tttaccattt cccatcccca ttccccacca cattatgtca agattcaagt
                                                                     2340
tataaattaa cgttttactt agactttgaa agagatttca tgagtaattt gaatgaacct
                                                                     2400
tgctgaatta atctgaatag caactgtctg acttgataac tccagtgcca gtatagtggc
                                                                     2460
tgctgcatag acactattca gtaaatgtct gatgaaagaa attggacttt ttccctttaa
                                                                    2520
tactgatgat gcaattttga aatgttgctt gttctggaat acttcggaag ttaaacaata
                                                                    2580
aagtcagctt ggagaggaga tcatgatctt tatactgtga atagcagaat gtcacagatg
                                                                     2640
aagaatatta aaattagggg cgtccactcc aaaacatatc accagagtga caacttcagc
                                                                    2700
cctcagcctc tgcaatccat atatatcctg gtcttgggag tccatagaat actgtttcct
                                                                    2760
tctaataaag gtttcaaaca aaaaaaaa
                                                                    2789
```

```
<210> 5880
<211> 2966
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2836)...(86)
<223> similar to gi1702932 in the genepept database release 114,
```

```
<400> 5880
tttttttttt ttatatagag attgtacatt tatttattac tgtccctatc tattaaagtg
                                                                       60
actiticiatg agccaaggic tittactitt tettetigee tittagggget teagggggtt
                                                                      120
tcccctcagc tacagccaac tgtttcttta gatccaagag tttcgccacc tccgcagcaa
                                                                      180
cctcqttctt gtctgccttt tgtgctttca gttctcggac aatgtttcct tgttttgtca
                                                                      240
cttcatccat cagcgcttgt atctgctgtg gcttggctgt tgtaacagtc tctacaactg
                                                                      300
ctggcttcgg ggacgttttt gcctggcccc ctccaaagcg ctgccttaaa ctttcaatct
                                                                      360
ggtcattttc caatttttgg aacaagggac tgactgtqcc aatctqqtqt cctqctqqta
                                                                      420
aggtacacag gaagtttgtc agcaggatac tgcaggctgg aggtgggagc tgcagctggg
                                                                      480
cctggattgt ggcactaacc gtgggcatgt aaggctgaag catgacagag agcaaggcag
                                                                      540
ctatattcac tgccaagcca gtcactgttc ctgcccgttg cctgtcagcc tcactgcctt
                                                                      600
taatccgctt cccagggctc attcacctgg aatatattgg ttgccatgtc ggagatatgg
                                                                      660
tgaggatact gcgcaaggca tcccggatcc gaaccttctc aagtagcttq qtgatagtgc
                                                                      720
tggagctcca gggtgacatt gggccagcag gcgctgatca tcaggggtga gcaccatctc
                                                                      780
aggcacatag cccccaaag aacttagaca caaacatccc aagctctgtt gatgaagttg
                                                                      840
cccaggttqt taagcagctc aagaattatt cttcagcagc aggtccgtcc aggagaaagc
                                                                      900
actgtcgctt gccctcaggc cgaatgtaca gcaagataga agcgcgagat gtcaggaggg
                                                                      960
atccccgtgt cgtgggccca tgtcccgaaa cactcccaca ccgcggctct tagagaattt
                                                                     1020
tcccatcctc atagttcagg tactctgtag caatgaggtg gctgacacaa ggtatagtta
                                                                     1080
tcctcagctc ctagggctga gctaggaaag actaagctat ggaaaggaac attqtctttq
                                                                     1140
gcccatgaac tgatacaggt cgacttgctc tgggttcgtt ccaccatctc tcccactggt
                                                                     1200
ctgtgtagtt ggctgtgatg gacagatagc caatagtggc atcaaaccag acatagaata
                                                                     1260
cccttgtctt caaaaccttc ttaaggggta ccagggttcc cccaatttga ggtctcgggt
                                                                     1320
ttattgccag cgtggctttg agggccattc ccggaagcca aagaacqqqq tqataaactq
                                                                     1380
ggcattgggt gtccagtcac tgccaggcaa tgtcctcccc aaccactcct ccagtcqctt
                                                                     1440
ctccagctta ggcaggtcca gaaacaggtg ctggctcgac tgcaccacag ggcatgatcg
                                                                     1500
gcagacttta cactgaggct tcttaagctc gacagcattg atgagcttgc cacacttgtc
                                                                     1560
acactggtca ccccgagcct cctcatagcc acagaaggga cacacgccct ccacgaagcg
                                                                     1620
gtcagccagg aaagcgagca cagtgctcac atcgcagttg ctccacagta tcttgcagca
                                                                     1680
caaaacctcg tttcagcaac tgctggaaaa tgtcctgggg tgattttggt cttqctgtqq
                                                                     1740
agtggtggtg cgaccaaaaa tatcaaacga aatgttaaac cagcgggtag atgtcagcat
                                                                     1800
ggatgatgtg gtacttgtcg cagatetect ggggggttag teceteetee cagageettg
                                                                     1860
gtctctgttg ctgtaccata ctcatctgtc ccacacagat agagggtgtt ccactggcgg
                                                                     1920
aggcgagagt acctggcaaa gacatcggca ctgagcacac aaccaatgat qttcccaagg
                                                                     1980
tgggggacat tgttgacgta agggagggca ctggtgatga gcacattcct ttctccaqcc
                                                                     2040
acaggcaaca ctggattctg ctggggccgc agcgggggca aactttctaq qcccttctcc
                                                                     2100
caagcagtaa cagccatagc aatctcctcc tcagataggg tagccagctc ctcctcctca
                                                                     2160
ggctcaattg gtgacagccc tttcccttca gcggggctgg gctggggctg cttttggagg
                                                                     2220
taaggcccgg agagccagga caccttgctt gtttcagtac aagtcttctt gcagcttcgc
                                                                     2280
tgacatggtt ccttgggtac tcagtgtctg gaaccagctg tgcagggcac tcagctcctc
                                                                     2340
agggaggtag gcgggatctt gcagtaatgg gtatagggct ccccacaaaa caatgtcggc
                                                                     2400
tagagattct gtctccccag ccaggaaagg acagtttctg acgactcaag ctgtggtcaa
                                                                     2460
tgtgagtcag ggttctccgc actgaaccaa gaacatcttc cccctttctt gccttggacc
                                                                     2520
acttaaatag tacagggcag cagacaaagt tggctgcagc tctgtcgctt cccattccag
                                                                     2580
ccactggtta gtgaggtcat cttgctccca gccagataac aaaaaaaaa tatcggcaga
                                                                     2640
ttgcactagt ggagaagagg tagttgccgc tatccagctg caagacaggg accttaggcc
                                                                     2700
gggtcaggaa cgggaccaca caatcttecg ggectacagt getgatgage acetetgete
                                                                     2760
tgccccgggc tctcccggcg gcggccagca ccggcaagca acccggaacg ccatcactca
                                                                     2820
cgaacagtet catttegeeg tgaateeete getgatttat aaagtgeetg etttteetgt
                                                                     2880
gggaattcca gaatagatat aatggtggtg gccaggggct ggatggaggg ggatagaaag
                                                                     2940
ggatagctcc aaggaggctg gggtgg
                                                                     2966
```

gc

```
<210> 5881
     <211> 842
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (26)...(569)
     <223> similar to gi32472 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5881
aggggctggg ccctgggaga gaggaggctg tagctggggg ctccagcccg cagggcccag
                                                                       60
cctgggtgtg tcctgcagct cctgctgagg ctgggcccag gcctcccagc cacgtgtgcc
                                                                      120
cagctgtttg taggtccttt gaagggctgt gtgccaggtg tttgtgcgcc cccgtgtggg
                                                                      180
gccgatgaca gctgtgcacc tggtgtcttc gtgtgcctgg ctgccagcgc gtgtgccctg
                                                                      240
tgcgctgtgt gtcccgcagg gtccgtgtct gtgggggggt ccatgtgtac aaggggtgtg
                                                                      300
tetecaggee tgtgetetea egtgtgegge eageeeeeg egtgeatgeg gggeageatt
                                                                      360
tatttgcact tggtgcacat agtagcctgt gaggtagccc aggatgaaga tgatccagaa
                                                                      420
gagggccacg ccgcccagca ccttcatggc gatgcccagc ttgcccgtgc acagcctctg
                                                                      480
ggagateetg eggeagegtg aggeetette tgtgetggae acageeceta ggetgaetee
                                                                      540
gtccctgctg ccgtcctccc acctactata gtggacgtgg ctctcctggg gctgcatgct
                                                                      600
gtggggctgc agcgggaggg gcggggcctt ctcggtgggg agatcaagac aggtggccag
                                                                      660
gctgtggctt caccggagaa ccttgcctga gggctggggc ctctgggcca ggttgcggtc
                                                                      720
agggcctggc cagcggcccg cacctcccag cggggcaggt cgtgggctga ggtgcggcag
                                                                      780
acgeetegag cetgtgteee egegtetetg ggeteegeag gggeegaatt eeaccacaet
                                                                      840
                                                                      842
     <210> 5882
     <211> 808
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (596)...(737)
     <223> similar to gi433816 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5882
gggaggtgct cagtcaagcc tctgagagga gtgggggggg gggcgaggag tctcttgctc
                                                                       60
agagcccctt agggactggg acccgttgac tctgagctgc ttttgaggct ggatcaggta
                                                                      120
ccagcggcct gggggtcgta caggatggga gaggccgggg cttgggatgt tqccagatct
                                                                      180
```

```
acgttgaaaa gtgaagcagg aagagggca ctgaggctgg gcacatgggg aaaaccgtgg
                                                                      240
agagccggcc tttggggact agaagagtgg gaacaatggt tgacaaatgg tgagtgtggg
                                                                      300
gtagaacagc agtaacacaa taccaggatc cacagagtgg ccagggccag agtggggaga
                                                                      360
aggaacagga ctctgcagat ggggagggta aggggctggg tggcgtgaag ggtggttgca
                                                                      420
gaattegggg agggeageta geetgtgaee eaggtteeaa gggeaetgag gtetgggeea
                                                                      480
ggccgcttgg aggcaccaga gcctcagagg aggggtgggg tagaggaacg gatccagcat
                                                                      540
qqtqtccccc ttggccacca gagggagttt tctaaatttg agcatggctc atcqctqctt
                                                                      600
gaaattctac gtcacagtgt ggcctgcatt gaggagggcc cacacctgtc gctacctcag
                                                                      660
actcacctgc cacctgcctc aagtgcatga gagagaacag gaaaccagaa attgtcagga
                                                                      720
tcgaggatta tgggaaaaga gtaaaagcct agctgtcaga tctgaggttc caccaaggag
                                                                      780
cactgatggg tgcttctcat taggaagg
                                                                      808
```

```
<210> 5883
     <211> 704
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (86)...(507)
     <223> similar to gi200543 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5883
agcgtggtgg aattcccgcg ggtaaggccc tccctagacc ctttatacct actttacctt
                                                                       60
teggaggtea agacacetee tgttgeegee teetegeeca acacacagge geeceegea
                                                                      120
cgggtaccaa gcttgactaa cggcctctag gggtgtgtgg tgggacttga aatcctccct
                                                                      180
taatgaagtc acaccttctc cgtccgcttc cacccggtcg gcccatggca gagcccccat
                                                                      240
gtagcccagg aatcggcttg gcccttcggg gaggtcagcg tccttactat ccccactctc
                                                                      300
cagtgcggca cattcgttcc cctaggactc cggccggttg ccggccccag gcggtgcttc
                                                                      360
tececaceae egeecagete ageteageee ageceageee actetgeeet tagaggeeet
                                                                      420
tctccccaaa gacgcactcc agaagtctcg ccctcgtgcg gctgaggagc ctgggatccc
                                                                      480
agacctgaac aaggtgagca tooctatatt ttagcccaga aagatotgtg tggctcactt
                                                                      540
gccggcctcg ttctgtcaca cagagtccag atttagcctt gagttttcct agtgaaagac
                                                                      600
agaccctggt atcactatga ccctcctcag gctttcttac cccgcctcag aaagcagtga
                                                                      660
ggtgtctgct ttctcccagg gcttctttag ataggggtct taac
                                                                      704
```

```
<210> 5884
<211> 898
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (616)...(226)
<223> similar to gi159167 in the genepept database release 114,
```

```
<400> 5884
agtcgggcag cctcccagat ctctgacaac tttacaagct gcaggggaga ccagcgataa
                                                                       60
ccctgaaacc ttcccatgta acccccaggg cgctggccag accaagagca gctgccacat
                                                                      120
caggetggtg ccagcagtee etgeetgeea caetgeece ccaccaggee actgaatgag
                                                                      180
gcagctggga gaggcaggaa gaggggcttc aggctgaatt cttgatttga cccttcttgg
                                                                      240
cccttttgct tgggagacct ggaactgaag ggcatggaac cccctttgga ccctgtgggc
                                                                      300
aggaaaactg ctccccttgt ccctgcctgg gggtaggaca gataaqqctq ctcqtcctqc
                                                                      360
ggcggccccc cagcccacct gcttcctatc cgtttcctgc aggatggtgc cccctgcatc
                                                                      420
ccctcaccca ttgctcacgg aaggaaaagc agacgtgqcc agcctgcatc ctctgccctc
                                                                      480
cctgagcctc ctggcctggc tggccacagc tggcatggac gccatcagca ggctccqtqc
                                                                      540
aggcggacgg ggcagccccc acagccaggg caccctggcc ctcactcacc agcacccttt
                                                                      600
tgttcttttc ctagcaaaat atgcaaagtg tgaccagtgt ggaaacccaa aggtgagtgg
                                                                      660
gttccggctg caagccacca aggcttcagc tttgggggtg ggcagggtgg tctctgcact
                                                                      720
gcttggggtg gcaggtctgg tgcccgccca gctgggtttg caacgtggct caaggtggca
                                                                      780
tggatgcctc aggacggccc cttgcttcca gccaagcccc tgcccaggcc tggaqqqqaa
                                                                      840
gagagtctgg gtgggttggg gtgagggaga ggcatctggc ttgagagcag ttcccagg
                                                                      898
     <210> 5885
     <211> 1273
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (395)...(1076)
     <223> similar to gi163132 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5885
taaggaggag agaccaaaag ggaggcctga actctcaaac tccgaatctg attttcactc
                                                                       60
tcccaggaag gcttcggaaa tcactgtgga ttgtcaatac aggaqtccat actgactgaa
                                                                      120
tccctaattt tggcctgtat tcttctccct ctgtgaacca tcttcttaga agtcactgaa
                                                                      180
ccaagagtgc cagaaaacca tcccaagact cacacagagt tgttcttcca tagtggatgt
                                                                      240
tttggccact ggacatcaga accacatttt gggtttgaag aatcttctac atgctgagaa
                                                                      300
agtggaactc cagagacact cctgaaattg tcctaagtca aaggagccaa acggtgtacg
                                                                      360
agctccctct ctgccgtccc ctctgagagc agccatggcc ctgagtgatg tcgatgtgaa
                                                                      420
aaaqcagatt aaqcacatga tqqctttcat tqaqcaggaa gccaatgaga aagcaqaqqa
                                                                      480
aatcgatgcc aaggctgagg aagagtttaa cattgagaaa ggacgcctcg tgcaaaccca
                                                                      540
acgactgaag attatggagt attatgagaa aaaggagaag cagatagagc agcagaagaa
                                                                      600
aatcctgatg tccaccatga ggaatcaggc gaggctgaaa gtcctgagag cccgaaatga
                                                                      660
cctcatctca gatttgctca gtgaggcgaa gctgagactc agcaggattg tggaggaccc
                                                                      720
agaggtetae caggggetge tggataaaet ggtgetecag ggtetgetee gaetgetgga
                                                                      780
acctgtgatg attgtacgct gccggcccac aagacctcct cctggtggag gctgctgtac
                                                                      840
aaaaagccat ccccgagtac atgacaattt cccagaaaca tgtggaggtc ccagattgat
                                                                      900
aaagaggcat aactggctgt ggaatgcagc tgggaggtgt gggaggtcta cagtggcaat
```

```
cagagaataa aggtttcaaa taccttggaa agccgactgg atctctcagc caagcaaaag 1020 atgccagaaa tacgaatggc cttgtttggt gctaacacca acagaaagtt ctttatataa 1080 gcctctggga agtgaagcta gtgttgaacc actaaaccat aaaagtttaa gttttttggg 1140 gaaaggaaac tagtagtgtt tcctcctctt tgatgctctg atactgttct gttttcttc 1200 acgaaatacc ctttggatag ctaaagtgtt aactttgaaa taaagcccga aattaatgct 1260 cagaaaaaaa aaa 1273
```

```
<210> 5886
<211> 2966
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(2967)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (23)...(2020)
<223> similar to gi1781037 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5886 gaaaagagga cttattgttg tcatggccca tgagatgatt ggaactcaaa ttgttactga 60 gagggggtg gctctgctgg aaagtggaac ggaaaaagtg ctqctaattq ataqccqqcc 120 atttgtggaa tacaatacat cccacatttt ggaagccatt aatatcaact qctccaagct 180 tatgaagcga aggttgcaac aggacaaagt gttaattaca gagctcatcc agcattcagc 240 gaaacataag gttgacattg attgcagtca gaaggttgta gtttacgatc aaagctccca 300 agatgttgcc tctctctt cagactgttt tctcactgta cttctgggta aactggagaa 360 gagetteaac tetgtteace tgettgeagg tgggtttget gagttetete gttgttteee 420 tggcctctgt gaaggaaaat ccactctagt ccctacctgc atttctcagc cttgcttacc 480 tgttgccaac attgggccaa cccgaattct tcccaatctt tatcttggct gccagcgaga 540 tgtcctcaac aaggagctga tgcagcagaa tgggattggt tatgtgttaa atgccagcaa 600 tacctgtcca aagcctgact ttatccccga gtctcatttc ctgcgtgtgc ctgtgaatga 660 cagcttttgt gagaaaattt tgccgtggtt ggacaaatca gtagatttca ttgagaaagc 720 aaaagcctcc aatggatgtg ttctagtgca ctgtttagct gggatctccc gctccgccac 780 catcgctatc gcctacatca tgaagaggat ggacatgtct ttagatgaag cttacagatt 840 tgtgaaagaa aaaagaccta ctatatctcc aaacttcaat tttctgggcc aactcctgga 900 ctatgagaag aagattaaga accagactgg agcatcaggg ccaaagagca aactcaagct 960 gctgcacctg gagaagccaa atgaacctgt ccctqctqtc tcaqaqqqtq qacaqaaaaq 1020 cgagacgccc ctcagtccac cctgtgccga ctctgctacc tcagaggcag caggacaaag 1080 gcccgtgcat cccgccagcg tgcccagcgt gcccagcgtg cagccgtcgc tgttagagga 1140 cagcccgctg gtacaggcgc tcagtgggct gcacctgtcc gcaqacaggc tggaaqacag 1200 caataagctc aagcgttcct tctctctgga tatcaaatca gtttcatatt cagccagcat 1260 ggcagcatcc ttacatggct tctcctcatc agaagatgct ttggaatact acaaaccttc 1320 cactactctg gatgggacca acaagctatg ccagttctcc cctgttcagg aactatcgga 1380 gcagactece gaaaceagte etgataagga ggaagecage atececaaga agetgeagae 1440 cgccaggcct tcagacagcc agagcaagcg attgcattcg gtcagaacca gcagcagtgg 1500 caccgcccag aggtcccttt tatctccact gcatcgaagt gggagcgtgg aggacaatta 1560

```
ccacaccage tteetttteg geettteeae cagecageag caceteaega agtetgetgg
                                                                     1620
cctgggcctt aagggctggc actcggatat cttggccccc cagacctcta ccccttccct
                                                                     1680
gaccagcage tggtattttg ccacagagte etcacaette tactetgeet cagecateta
                                                                     1740
cggaggcagt gccagttact ctgcctacag ctgcagccag ctgcccactt gcggagacca
                                                                     1800
agtctattct gtgcgcaggc ggcagaagcc aagtgacaga gctgactcgc ggcggagctg
                                                                     1860
gcatgaagag agcccctttg aaaagcagtt taaacgcaga agctgccaaa tggaatttgg
                                                                     1920
agagagcatc atgtcagaga acaggtcacg ggaagagctg gggaaagtgg gcagtcagtc
                                                                     1980
tagetttteg ggeageatgg aaateattga ggteteetga gaagaaagae aettgtgaet
                                                                     2040
tctatagaca atttttttt cttgttcaca aaaaaattcc ctgtaaatct gaaatatata
                                                                     2100
tatgtacata catatatt tttggaaaat ggagctatgg tgtaaaagca acaggtggat
                                                                     2160
caacccagtt gttactctct taacatctgc atttgagaga tcagctaata cttctctcaa
                                                                     2220
caaaaatgga agggcagatg ctagaatccc ccctagacgg aggaaaacca ttttattcag
                                                                     2280
tgaattacac atcctcttgt tcttaaaaaa gcaaqtgtct ttggtgttgg aggacaaaat
                                                                     2340
cccctaccat tttcacgttg tgctactaag agatctcaaa tattagtctt tgtccggacc
                                                                     2400
cttccatagt acaccttagc gctgagactg agccagcttg ggggtcaggt aggtagaccc
                                                                     2460
tgttagggac agagcctagt ggtaaatcca agagaaatga tcctatccaa agctgattca
                                                                     2520
caaacccacg ctcacctgac agccgaggga cacgagcatc actctgctgg acggaccatt
                                                                     2580
aggggccttg ccaaggtcta ccttagagca aacccagtac ctcagacagg aaagtcgggg
                                                                     2640
ctttgaccac taccatatct ggtagcccat tttctaggca ttgtgaatag gtaggtagct
                                                                     2700
agtcacactt ttcagaccaa ttcaaactgt ctatgcacaa aattcccgtg ggcctagatg
                                                                     2760
gagataattt ttttttcttc tcagctttat gaagagaagg gaaactgtct aggattcagc
                                                                     2820
tgaaccacca ggaacctggc aacatcacga tttaagctaa ggttgggagg ctaacgagtc
                                                                     2880
tacctccctc tttgtaaatc aaagaattgt ttnaaatggg attgtcaatc ctttaaataa
                                                                     2940
agatgaactt ggtttcaaaa aaaaaa
                                                                     2966
     <210> 5887
     <211> 2408
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2409)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (2240)...(835)
     <223> similar to gi1850772 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <40.0> 5887
ttttttttt ttcatttagc aaagttttta ttcaaaagct tctcagcacc atctagttat
                                                                      60
cagaaagaat ggatatcacc ttttcctgcc cacccaatcc ccagttccac aggcagaagt
                                                                      120
taaacccatt tggctagagt tccccctaat gattatgact gagaccatga taagattttg
                                                                     180
gttgttctca cccaactgtc tctaagcctc tactcaaacc tgactcaagc agagatgtgc
                                                                     240
acaccccaca gttcagaaca ggaaggaatc atgtcagatc tgatcaacct cccattcttg
                                                                     300
```

420

480

ggctattaga ggcacaagaa attaccttga aaaaatggaa ttcagtgact gccatctagg

aaagacagtg atactgtcca gcagcatgca gttccgagag ctcaactctt aggccaccct

ccctccactc tactctagga acaaggagca ttaggtctgt tttctctcca tacacctcaa

```
tcgctcgtcc tctcgtctta ttaaaacaca gacacagaac caaacttttt gacagttaaa
                                                                      540
gacaaacaat tacatctaat taaaatgcta agagatcctg agctgttaga gatgaggaga
                                                                      600
gtagatagta tgacctgatc ttcccccctc tttttttcc tttaacagta ttctgtttca
                                                                      660
gcataaagca cactttctga agaggttcct ggtggagact ggaaaatctt ggacttgtgt
                                                                      720
cctgtggcaa acaacacaag tccccttgca taactttggc ttcaqtccct qqatctgtcc
                                                                      780
tttgcaagct acgtcaggtt ccatggaagg aaggaaagag ctggagggca gtatcactca
                                                                      840
gccaaagctc ccatggggtc ccatgctggc aggacaaatg ggttccctgc tcctaacaca
                                                                      900
gctagcacct cttccaggga catgcttcct gtcccaccaa ccacttcgta gacatactca
                                                                      960
agagacccaa ctcaatctgt catgcacagg taacctttgg tggccatggt cttcacccca
                                                                     1020
ttgaaattct ccaactctcc cattttgtga aaagcaccat ccctgaatca tcccqqctct
                                                                     1080
gagcacagca gtgaaggtca tggtgtgggt cataacgtga ctcaccaaaa gtcacgcctc
                                                                     1140
tecgetttat teatgttett caaggagaea ceaaacaeta acteatggte atagagatte
                                                                     1200
atgtcactga gggcccagct tgctattgaa agtgttttcc aacatcacag ccaaaccaca
                                                                     1260
cagccgtctc catctttgat ggaggcagca accatctttt tcaggaagtc aatgggctgg
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ttgttgtaaa agagtttttc tcccctccaa accatattgc cttaagtatt cccactgtgt
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aaagtttgtt gtacttgtgc tggggcctag ggtcattcac taaacaaatc ttatcttcca
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tattgaagag tggcttgaca tgttncccct gtaaaactcc aagggtgttc atggggccaa
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ttttctgata atttttatct ttgtctcgat attcccaqqt qaatqtctct qqtqqattac
                                                                     1560
ctcttcagat gcgccaccat tcgcaagtat ctcctccatc atgacgtcct gtgtggccga
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gattteteet ttegttgete caetgtgtae eaggtteege agtegtatae agaattetet
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catcttgtga ttcagaatat cattcatcct tctggttgcc tctgttgtat aagattcagg
                                                                     1740
gaagcatttc ttagggataa caccatattt ttcaacaata ttaacaagca tatcccattg
                                                                     1800
gccaccatca tttgcagggt tcataagcaa aaactgcacc agcctcccat cctcaggctc
                                                                     1860
ctttctctgg gctgtgtcca caaaagcact caagaagaaa taacagcgtt caaccttgtc
                                                                     1920
ccaaaaaaac aggtaagatt ggctaaactc aaattcttca atatttaact ttttcatgaa
                                                                     1980
tggaagcctc ataacattca gacaagaaaa gatccagcat cgccctgagc tcttctggtt
                                                                     2040
ggtgattggc ttgccctcct ggggcacggc gtgctggaac acatgctgcg cgcgctgcac
                                                                     2100
cgtggcccgc ttcagacaga tgtccagcag gtcgtgggtg gtcccgacat tctgggcaag
                                                                     2160
tacgaactgg gggtcggaat tcagtttctg tatcagagca gctaccttct ccgaattcag
                                                                     2220
tecegagetg eteatggege ecaegetgee eggeggggta aeggtagett ecagggteet
                                                                     2280
tgggcgagcg ccgggattgc gctgcggctc gctgcctagg gggcccgacc tgtctctcgc
                                                                     2340
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ggctgagg
                                                                     2408
```

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<210> 5888
<211> 4369
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)...(4370)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (3923)...(391)
<223> similar to gi532056 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5888 tttttttttt tttaagatag aaatctatgc actttaatga ttgccagaat tgcccagcat 60 agcttcagta aaatagagaa ttgtctagaa aatacaatct ccaaaatgtg tgcaagtact 120 gcaaaccgga cagaccgggg cagggcaagg cccttgaaac caagtcctcc ttgagcacct 180 ttcccaggtt agaaacccct cttcagcctg tgcttcgcac gtttccttca gcgtgccgcc 240 cattcagact gcgccaactt acgtccccag tgcccacgcc tgngtggatc aagtgtccaa 300 cgggaaagta tgagttaggg caagcgcttt ttttttaagc tgtaaacgct tcacatgact 360 gggccccgta aggaaattgt ggggagctta ggatgagcct gggagctttt tcagggactt 420 ggatgaggac tctgtacaca aatgtgtact ggcagagagt ctgcaccagc atcattctct 480 gttgccctca gcatgtccag cactctcggg atgtccagca cctcattgtg ttccaggcag 540 gcgatcatga tetecgacaa aatcaccacg ccagteette etaccccage actgcagtgg 600 accaacaacg gagggttggg gctttgggga tcacttgtgc tatttgtatg gcgtcgaaca 660 gactggatct cttcaagata tgataaaaat cccttgaggt cttctggaca gccatgttca 720 ggccagtctg tgtattggag gtgccagacg gtcctctctt gcccggtaag gaggtgcttc 780 atcttcaggc ctgtggtggc atagcagcca gagtctgtgc ggaaccgggt cgtgatctta 840 aaccttccat aggtgacagt gttgtgcctg gaaccaagtc gtggccagta cctaaagctc 900 ttctcccttc caccctcctc ttctgctgtc accattgcta taattgcaat tccctgttcc 960 cataccatct gccaaaaatc ttgacaggta ttctgtaatg gtccctgtgt ggcaatataa 1020 tcccattcga ttccactgac agagacctta atatgtgatg cgttgatgta accagtgttg 1080 ttttctttag ttgggaccaa ctccactctc acatcatcat aaggaagaac atcttggaat 1140 cgatttcttt ctgcattttc agggagtcgt gctgttgagc actccccatc aactagccgt 1200 ttcttaagaa ttctttcata ttctgtgaat accattcctt gttctaatcg ttgttccaga 1260 attttacacc tttcatcatt cgttgctctg gtagccactt cctttccttc atcaggcaga 1320 ggcactcgag atagggagag tccatttagg gcagccagtt taagaggacc aatttttttt 1380 gcatctactc gagtcttttt cattccccct agaggcggga gcccttccac gatgttcttc 1440 ttcccagaga gaaggtccga caccggcctt ttcttcagag agtccctccg ggctcggtag 1500 cggcctgacg tggtgaggtc ggactccgac atggagggca tcagcagccc gtctctccag 1560 ggccgctggg cctctgcggt cgtgcggacg gggctgctgt ccatcatcct cttctccgcg 1620 tctgggacgt gggccttggg ctccaggatg tgcaggggcc cggcgagcag gacgcgaggg 1680 cagccaggtg ggtcctgggc caggccgggc cgaggctcgc gcgcacgtgc agggggcgcc 1740 egggeeeege teteeteete gaagteeteg teeteeteet eetegetget gtggattage 1800 atggtggcgt ccgacaggga cttcttatgg ccgtacctca agccctccgc ctcctccggc 1860 cetteteget gtgteetete ggtgaaaaeg etggggetgg gageecaeeg agaeggeteg 1920 cggcgcccac ctctgccgcc gacgcggata gggtgcgctc cttgagccgc aggccctcca 1980 ggccgtggct gagcccggcc acctcgatgc tgttccgttt gtgcagctgc gcgtggcgcg 2040 cggcggtgag gggctcgctg acctcctgca gcgagtgcgc cacgggcagg ctgtcctcct 2100 ggaacgtttg caccgagtgg tgcacgcgcc gcgtgatgag gtcggggttg ctgctga 2160 tgtaaaggtg gegggaeagg tetggegtge tgttggeggg eetgggggge gggtagggtg 2220 ggggtggccg gtacacctgc gtccgcatga tgttgggaga cgggtagtcc tgcgcctgca 2280 gctgcgcatt ggtcagctcc ggcacgctga ccgcgcccac cacgggccgc cgctcggcag 2340 ggtaggggta gggagacggg ctgtggaagc tgtagctcag gctgaacggg cagtgtgcgg 2400 ccgctggcga ggggagctgt gcgtgctcgc ggatctcggg ctggctgtag accagcgccg 2460 cgggcctgct gtaggcgtac gagctgccga tgttgaggtt tcgcagcgag tggctctgcc 2520 gttccgcatg caccaggccc ctgttgagct gcttcatcac agtctcatag tctggggtgg 2580 ggcggtagga cgggggtatc acggcgctgt gccgatggga cgggaggtag tcaggcctca 2640 tgacgtcact cccggtgatg ctagggttgg acgacatcgg cgagggctgc aagtagggct 2700 gaggattatt taaggagttg gtgctgtgtg cactgtagac actggcattt acggatccga 2760 ccgttgaagt caatctgggc tctattcaag cttgtctgaa attgaccata gtatcccttc 2820 ctggttgggc acaaagaggt tatcttggga agaagcatat ggttctgtat aatgtccatt 2880 atagtgcaac tggcggtggg ggaggcatca cgtagggctg gggtttaggc agagacatcc 2940 ttgaagaaga cctcctcctg attgggttca ctgtgacagt ctgagtttgc aggttacact 3000 ggtttagtct gtaaaacttg tgtcgcgcaa cacagagtct ccaaatgtat tttgctgttt 3060 ccatgtcttc agtttgaaat tgaatggtct cctctttatt tgccagctct aatgcaaaaa 3120 aggacttgtt gtgggacatg ttggcaatgt catgccacct aaataccaca ggatgccttc 3180 cattettgtg tttcacaaag atacettcaa gacaegetee aatggatatg teaetteett 3240 ggctatcctt agcagggtag ctctcttctc catagccatc cattctctct acctcctgca 3300 tgtacagcat ttcagcatca ggagctgtga gccctctgta tttctgatgt agtaaggcca 3360

```
ctttttgggt tgcttcttcc aatacttttt catcttgtaa ccatcccaca ggaaacaagg
                                                                     3420
caaatttctg aagaaagtcc tgggattcat actgatcaaa gtcaccaaaa atcgcttqaa
                                                                     3480
caqctaagcc tgctaggtga attggctgtt ccaaggtaca agggatacct tcttcccaga
                                                                     3540
tatectteet cagttgeaga taatactggt acceggtaat cetetgetgg aagegaggaa
                                                                     3600
cctgaggcgc ttaaaccccc attccaaaat agacggtagg ttccaatgca tatttatcca
                                                                     3660
gctgcttctt caaaggtttt tccaaatcta cccaccggcg ctgattttgc ttgttgtagt
                                                                     3720
accagagget gaagtaagtg accteecgea geteeageet etgggeeaeg geetegagge
                                                                     3780
tttcctggcc agtgctctcc acggacaggg tgaactccac aaactcgtta ttaagcagtt
                                                                     3840
ggatccgggc aaccaggcaa ctcttgctgg acaccgtgta gcgccgggtg cgtttcagtt
                                                                     3900
tcaacccaaa tggcagtggc atcttcttct ttcttcaaga atggaggagc aaagagggaa
                                                                     3960
aagctacccc caccaaccca gcgctggtga cgccaggaga aagcgatcct ctccggatgg
                                                                     4020
gacgaacact gtccggcctc cagctgctca cccagcagcc gctgccgcca ttaaaaagca
                                                                     4080
acggagtete caatggceeg aggaagggag cattgacgee agegeactag aagagtggea
                                                                     4140
gttctgaaaa tccagacccc ggccctctc cagggtgggg acgcccaaac aggccttcac
                                                                     4200
ttaagcggag ccgcggccca gaaggggagg cgggcgaggt cttccacgcc atcctqaqtt
                                                                     4260
aatgagcggc cggaggcaac aaacccaaga agcccacggg gccttggagc actcaggccc
                                                                     4320
cggcttctcc cgcgtcctcc ccttgggaag agcacgcggc gttacgaaa
                                                                     4369
```

```
<210> 5889
     <211> 1976
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (768)...(1303)
     <223> similar to gi1843401 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5889
cagectggge gegtecateg tegagtacet teteetetge etececetee etetgettet
                                                                       60
atotototoc aattgocoto cotggootgo ggoogooogg tootoottoo cagoocagtg
                                                                      120
cagccaggca cccgggttcg gcttgctcag gtctctgtcc gggactqqqa aqccacqqaq
                                                                      180
ggccgggaaa gtggcacact cctggagctc aagcttccta ctctctcatc gctgaataac
                                                                      240
taccgggcag gactgggtgg aacagacagc atatttaggt cattgatggg ctgctgggtg
                                                                      300
gatggagetg gaaagtgatg ggeaetgett tetgggggetg eecaggttee tteegaggge
                                                                      360
tcgcttttcc tgggcagagc gggaaagagg aggggcaggc cggtcgcgaa acgcaaatag
                                                                      420
tcgagaatag cgatccgggg agaagcaggt gtctgtgggg cccaagagaa gtaccatctc
                                                                      480
gttaaaaatt cagattgaac tatcttacaa atggctccca gaagatccac tccctgtggg
                                                                      540
aacacagcag ttgtggaagt gaagacagga ctggacccag aataagggtt caaatatgtg
                                                                      600
gggaaatctg acctctaaat tcttataagt cagagagtga ctgaacaaca gcagtgagac
                                                                      660
atcqaagagt tttaatatct gctgtaaacc ttggcacaga tcatttactt ctctaagact
                                                                      720
gaatccaaaa agcacaatgg aatactataa taagctgaga cagcatggtg aattccagac
                                                                      780
aagcctgagc attccctata gccagagaag gaggcccaac acctaacata gccttggatg
                                                                      840
cagaactgat agaacttggg gaaagtgatg aagtagttga cctcacctgt gaatctctag
                                                                      900
cacctgtagt gattgaccta actcaccgtg actctgtagt gattattgaa caaaggagga
                                                                      960
ggccaagagc aaacacaagg ccactccaag accacactgg cagttgtgtg gtgaacaatg
                                                                     1020
```

1140

1200

atgaggaggg agtgaaaagg gacagagatg tatgtataac caacagtgcc caccataatt

ccctgcaaaa aaatttttt tgtcatatac tacctggtta tattcagtgt caaqtttgca

tggatggatg ctcagagatt gaacttagta tacaacacat ctactctata gaatgtggcc

<210> 5890 <211> 717

<210> 5891 <211> 699

```
acatctqtaq tcagtgcttc tgcacttcct ttacacatac taacactgcc cagtttgttt
                                                                     1260
gaaaaaaatc agcctccatc agtatcactg cagttatata tgatgtatgc cttattqctc
                                                                     1320
aagacagatc ctgtggctgg atttttccat gtctttgtgc aggaactatg ggttgttggc
                                                                     1380
atccaatgct ctgagcttaa aaatactgat ttttaaaaatt gctatctgca gtatataaga
                                                                     1440
aactetttga ttteteatat getetgagae tgetttttgt tteetttggt tttatgette
                                                                     1500
agctctggac ttcagttgcc agagtgtgcc agatactggg gtcgtcctta aagcaacttt
                                                                     1560
ccctttctta tagtcatcaa tttttagttg gccacatgta gacattctgg accacataaa
                                                                    1620
taaagacaac accctagaga tggtgaagta agttgtaaac taaaatccta agccccctaa
                                                                    1680
ttgactgaat ggaacccctc ttgaccaaag tgaccccaga aaaaccttaa aactgagttc
                                                                    1740
ctggccatga cgggatggga ggtcagacac gcttcattat atctccqtct cttttatqqt
                                                                    1800
ttagacacag caactgacca gcattaatgt caaaataaag atcataaggc tgacagaata
                                                                    1860
gaccctttgt ggcaataaca aattattcgt aagatctaag gtcatgccag gcaagtgtta
                                                                    1920
tgtcatgcac tcctacactt taaaggaata aacctatgtt cctaactgcc acaaga
                                                                    1976
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(718)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (423)...(65)
     <223> similar to gi19923 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5890
tttcgtcgcg agagcgcgcg gcgcggtgac tcgtcgctga gggactttaa gattgtagag
                                                                       60
gggcgcggag ggtcctcccc ggggcggagg gacacagagg gattctaggg aacctgccgt
                                                                      120
cgcgagtccc gcttcaggcg gagaatctag gcggcggcgg ggcctccctg aggcggagga
                                                                      180
gtcggcaccg gggcctggct gccggggaag gagagcacgg gagcggggac tcctgtgtct
                                                                      240
ggcggaggga cacggcgttc cggtggaggg atctgttcct tgtacctggt ccaqggttqc
                                                                      300
ggtcggggat ggagcggtta ccccgaccct gcgqqacctt cttcctctqq cqqaqqtqca
                                                                      360
cggcgcgcg tggagttttt ctggcggaag tatctgtgcg tggccccagg cccttcccqq
                                                                      420
cgcggtctca tctggggcca cttgttggcc ctcgcgttgg ggaggttcat gtggtgcatc
                                                                      480
ctgatgagaa ggggggtcac aggggtctcg gggccagggt tcagccagcc aggccccaqc
                                                                      540
ttgctctctt ctggtgctgc ccctgtccct gaattcatag acccggcttt ccctctcnnn
                                                                      600
nnnnnnnnn nnnnnnnnn ntgcgctttg cgcatgtagc agaggcaaca gtgtcacctg
                                                                      660
ggaagctggt ttcccccaaa ggaactcttg tctgtccgtt gttgcagagc cagcgca
                                                                      717
```

```
<212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (313)...(51)
     <223> similar to gi3883128 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5891
tttcqtatca gttttctcct cctttcttcc cgcgatcgcg cggctctctg gaagccttcc
                                                                       60
cactetatta ttgccgagga tecceeteet agacactetg agaaggtgee geteeggeet
                                                                      120
tgggtacggc ggtacccgga tgtggagtcg ctctcgcccg gctgggactc tgtggcqqqq
                                                                      180
cggagcgcgg cggctggtgc gggggcagag agaagggggc cccqatqaqt aactcccqqa
                                                                      240
ataaccgggt gatggtggaa ggggttggcg ctcgggtagt gcgcggcccg gactggaagt
                                                                      300
gggggaagca ggacggcggc gagggccatg tgggcaccgt ccggagcttc gagagccccg
                                                                      360
aggaggtggt ggtagtgtgg gacaacggca cagctgccaa ctaccgctgc tccggggctt
                                                                      420
acgaectecg catectggae agegegeeca ceggtaagee geggeeacet ggeeaggget
                                                                      480
tgcgcgcgcg gggggaaggg gcgagctgcg gtgggcgtcg gtgtcgcggg gagaggtctg
                                                                      540
cagtgggaca cctggtgggc agcgccqgc tqqaqcqaqc qqaaaqqcaa agcgccaaag
                                                                      600
gaattctagg ttccgaacgg gtgaacaaac actttcagaa aagaccctct acccccaagg
                                                                      660
gaaatgatgg cagcaccatc accgggatgc tttcaagcc
                                                                      699
     <210> 5892
     <211> 1967
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1858)...(782)
     <223> similar to gi3875351 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5892
ttttaaatca atagataaac atgatttatt actttgtcta ttaaagtagt ttcaacacaa
                                                                       60
ttgaagttta gactgcactg ggctgttccc atcacagtcc aggattatgc acagaccagc
                                                                      120
ccccaacccc agcaggggtg ccctgccaga acctgtgctg gatgcctagg agcacagaga
                                                                      180
ccactgcccg ttgttgggct gcgtgtgcac aattcatacc ccgatccata atccctaaga
                                                                      240
caagaatggc tgtcattgcc ctgggttcac tttctattca aagaggactc atttgggcac
                                                                      300
agccaatgta gtagttaaaa tgcattttga gaaaaaataa atattctgta caatgtattt
                                                                      360
acaaggatca aatgttttgt aacccaccc caattagttt cccaattggg aaactataat
                                                                      420
ttgataatta agaagccata ttattggccg ttagtgtcac gtcaacaaag aatgtggagc
                                                                      480
tgaccaccta aagtattttt gaactatata tatagagaga gagagagtac gcaaaatttc
                                                                      540
acattttaat atgcttagaa ggagttttta aagaagtaga aatgatttcc ttgqcctctg
                                                                      600
actttcagtg atgaaaatgc aaccatgcag tcccccttt gcagaagggc agttcttccc
                                                                      660
aggetttetg gaageagggg etteegagga gteteeacee aceteacaga acaeteacta
                                                                      720
```

```
tgagccctgc acagacagca ggattcacaa tctccaatag ggatggcagg ggcagccctt
                                                                     780
aaaacttgaa gaggtcgatg aagtgctgcg gagacacagg cgtgaagcag ctgtcagggt
                                                                     840
cggccgccgt gcaggggtgt cctgagtcct tccaaaagag aatgctgcag tgccgacaga
                                                                     900
aatgcagtgt gtctccgtac tgctccttcg ctgggtaatg tttctgaagt gcaaagtaca
                                                                     960
tcaacttcca ttcaatatga cctttttctg aaaggatcaa atgtctacaa aactgctttt
                                                                     1020
cagcaaaatg gtactgacaa agcttcttcc acagctgtct gtcttcacta agcatataca
                                                                    1080
acgtgggggt cacctggcct aaggtgatga tgtcccatcc gtctgagaac cggtatagga
                                                                    1140
tgttgttcag catgtgcaga ggaaggtcac tgagggtgag gccattgttc acttgcttag
                                                                    1200
tcatctgaag atcctgtagc tgttgttgcc aggcgagaat agtttctaat cggcaaatcc
                                                                    1260
aaatattgat gtttcccact aatacagact tccctactcc tctaataaga atgcagaggg
                                                                    1320
tagagettag gtettgeaga agatetttga ttaagegagg attgtggtgg teateaagaa
                                                                    1380
ccttttgaac gattttatcc aaaatgttga agtaattctt ctgtgccacg ccactcaatg
                                                                    1440
aagttaactg ggattttgca attagctgca acagtttgac cacataattg aaccttcgga
                                                                    1500
tatcttgaat tgcacttgag aagtctaacc gattaaaggc ttctcccaag gtgcaatagc
                                                                    1560
catgcctttc ctttgtgctt tctttatgga catagatcca tttttcacga taaaaacttt
                                                                    1620
gagtatttgt gtcatttcta aaatggtcct ttttcctttt tttcqatqca tattcatqct
                                                                    1680
cttcattatt gaatatttct ccatcttcac tatttaagat aatgctgtga ctgatgttac
                                                                    1740
aatggttatt ctctcttca agtttctgac tacaaqattc acatctcttc cagccatctt
                                                                    1800
ctgtcttaat ccaactccat ccaggagatc tccagtcctg acccaaaaat ggcatagttc
                                                                    1860
tectagegeg cetgeggeec ceagtettea cetgaegege cegegteece cagtgeceaa
                                                                    1920
cgggcgccc ggccacctgg gcccgcacct gacggcgacc aggcggt
                                                                    1967
```

```
<210> 5893
<211> 1086
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (786)...(360)
<223> similar to gi4033606 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5893
aatacactgc tggggtggca atctgccaag ggcccgaggg caacactcct ttacataaag
                                                                       60
tgaaaaagat ggcaaccaca cttctgctga atacagaggt ggagcatagg gtaatgcaag
                                                                      120
tccaaacaag cttcttgctg ggctggctcc ccagtcttgc ttagagaatg tgagctgccc
                                                                      180
ttetgtgetg egtteageet gaceaceeet getetgeaet aataatgaat aagettegte
                                                                      240
cctatctttc cctagcctgg caggccattg taaaacttta tgcataagag tcacacttta
                                                                      300
gattttgtac cctacacact tccactgaag cagaaataca aaagccacaa taatctcaat
                                                                      360
agccagcagg cattcctctt tagggactgt aaggtggtgg cttttcaaaa ggtggatagt
                                                                      420
agggtggaga gtaacggggc ggtgcacttg aggaccacat gtagctgggt gagggagagg
                                                                      480
cagactgggg ctcatcagaa agtccagagg gaggggagga tggaaagaca ccggaatgct
                                                                      540
gaaagtcata agcagaatat ggtggcaggt gaggagggct atggtagtag gtattgtagg
                                                                      600
atgccacttg gggatgagca tagtaagaaa ctgttggatg ggtattttca acagaacagt
                                                                      660
tcagtgctgg gagagttggg ttcatgtcct taaagcctcc aaggacagcg gcagtgatga
                                                                      720
tgcccaggaa caggccaaca atgttgagga tggtggcaga ccagagcagg tggtagaggt
                                                                      780
ggatgatatc ttggcaactg ctgacatcga tgtattcgta gtacccacca gtgatctcca
                                                                      840
cccqgttgcc acagttgtag aggtcacagc agaagcaggt gttgccccgg atgcgaggtg
                                                                      900
tgcagaattc acggctgagg tgagggcagt taacctctct agctgcctgg gtaaggttcc
                                                                      960
```

```
tcataaccct cgtggaagga gaatttttgg ttgaggaact tatgacctcc tcagcttcct
                                                                     1020
tctgtgatgt cttgggaaca taatggcacc gggtagcgta gagtggtttc agatcaatgt
                                                                     1080
gtctgg
                                                                     1086
     <210> 5894
     <211> 675
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (169)...(502)
     <223> similar to gi168455 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5894
gacetacace egetegeget ecetecacte ecagaceceg geetaacace egetegeget
                                                                       60
gcctccactc ccagaccccg gcctaacacc cgctcgcgct ccctccactc ccagaccccg
                                                                      120
tectaacace egetegeget ecetecacte ecagaceceg tectaacace egetegeget
                                                                      180
ccctccactc ccagaccccg tcctaacacc cgctcgcact ccctccgctc ccaggcccgg
                                                                      240
cctaacaccc gctcgcccca gaccccgtcc taacacccgc tcacactccc tccactccca
                                                                      300
ggccccatgc atgccttggg agcccagccc ttctcgtggg gcagatctca gcactcacca
                                                                      360
ggcgcctgcc tctcccacct agtgggccct ttcctgactg cactgcccaa caggagcctc
                                                                      420
cagggeeete eegetgeett tgtggetgee agagteeteg teeeettget ttgteteetg
                                                                      480
ctgtctccct ccactcccaa acctttacct atgggtgtga tttcatcccc aggagggaag
                                                                      540
caccagggaa gcacatagcc caagtgtcat ggagcccagg cctcaggtcc cgtatggagc
                                                                      600
ctgtgctcag gactgcagag gcagtgcgtg gccaccttgc cgtggagcag gcctgggctc
                                                                      660
cccgggtgag gtcct
                                                                      675
     <210> 5895
     <211> 2000
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc_feature
     <222> (358)...(1389)
     <223> similar to gi3878668 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5895
cgggctgggg gaggggagcg tggggccgac agttttgggg gtgaaaaggc aaaaggcggg
                                                                       60
```

tgaaaggctg cctcccgaga ctctccttgc ttggaattct gcccactctg cggagttagc

```
agtcacgace tecageacag gatgtggtae cacagattgt eccacetaca cageaggett
                                                                      180
caggacttgc tgaagggagg agtcatatat ccggcccttc cacagcccaa cttcaaaagc
                                                                      240
ttacttcctt tagctgtcca ttggcaccat acagcctcca agtctctgac ttgtgcttgg
                                                                      300
cagcaacatg aagatcattt tgagctgaaa tatgctaata ccgtgatgcg ctttgattac
                                                                      360
gtctggcttc gagaccactg ccgctcagca tcgtgctaca actctaagac tcaccagcgc
                                                                      420
agcctggata ctgccagtgt ggatttatgt atcaagccaa agaccattcg tctggatgag
                                                                      480
accacactct ttttcacttg gccagatggt catgtgacta aatatgattt gaattggctg
                                                                      540
gtgaaaaaca gctatgaagg gcagaaacaa aaagtcatcc agcctagaat actatggaat
                                                                      600
gctgaaatct accagcaagc ccaagttcca tcggtagatt gccagagctt cttagaaacc
                                                                      660
aacgagggac tgaagaagtt tctgcaaaac tttctgctct atggaattgc attcgtagaa
                                                                      720
aatgtccctc ccactcaaga gcacacagag aagttggcag aaaggatcag cttaatcaga
                                                                      780
gaaaccattt atgggaggat gtggtatttc acttcagact tctccagagg tgacactqcq
                                                                      840
tacaccaage tagetetgga teggeacaet gacactaeet atttteaaga geeetgtgge
                                                                      900
attcaagtgt ttcattgtct taaacatgaa ggaactggtg gcaggacact gctagtagat
                                                                      960
ggattctatg cagcagaaca ggtacttcaa aaggcacctg aggaatttqa actcctcaqt
                                                                     1020
aaaagtgcca ttgaagcatg aatatattga agatgttgga gaatgtcacc aaccacatga
                                                                     1080
ttgggattgg gcccagtctt aaatatctac ccatggaata aagagctgta tttgatcagg
                                                                     1140
tacaacaact atgaccgggc tgtcatcaat accgttcctt atgatgtcgt ccatcgctgg
                                                                     1200
tatacagcac accggactct aacgatagag ttgaggagac ctgagaatga gttttgggtc
                                                                     1260
aaactaaagc ctggcagggt cctatttata gacaactggc gtgtcctaca tqqcaqqqaa
                                                                     1320
tgcttcactg gctaccgcca actgtgtggc tgctatttaa caagagatga tgtattaaac
                                                                     1380
actgctcgcc tcttggggct tcaggcttaa aattgacagc atctggatta tgaatacacc
                                                                     1440
tggcaccctg gctaccagaa tttcatatgg gcagaataat attgtgtcaa actctacttc
                                                                     1500
agattgtctc cttatcccat cccacaaaac agaatctgtc cgtttctcta gtaagggaga
                                                                     1560
cttgttggag aggcgggact ctgagttatc taatgtcaga catctagtgg ggcagctctc
                                                                     1620
ttcctcatgt tataacatgg atccacttgt tttatttaaa ccttttaata taattttggt
                                                                     1680
cagtctcctt cagaaatata atctccatat tgataggaaa gcaataattg ccatgaggta
                                                                     1740
acgatttttt tcccaagtag atcagttaga aagaaatgca ttctagaaat aacaaaaatc
                                                                     1800
ctgataaagc aacaatttgc aaaatgtttg gtcttaggac accttaacac tcttaaaagt
                                                                     1860
tattgaaggc cccaaggagt tcttgggtgt gggttctatc tattgatact aactatttta
                                                                     1920
ggtattaaga ctgagaaata aataaagctc aagaagaaca cagaagccct gtattgcggc
                                                                     1980
cgggcagagg ataccagcag
                                                                     2000
```

```
<210> 5896
<211> 3775
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2313)...(1507)
<223> similar to gi5542020 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5896
aaatgtgaat tttatgaact aaataaatat ttggaaaatt agcgtgcttt aaaagggcaa 60
ttttggtttc attaatactg tatactttta ctgctttaag atgttaagag agtaatcctg ggaaaataaa acacatacaa ctttcaaaaa agacaggtgg tgtatgccct aatatttaaa 180
ttgctcatta aaggaagtgg atacaagcat taagatgaat catagcttca gtcaagaggc 240
tccacatata taggctgccc cggctccctc tcctaaatca tagacatcgt atgtagtacc 300
```

accttctacc aatttgattt tagaattagt aactgacaca aagcattcta ggacagacgc 360 catactatta tctcccacat tgacatttat taataacatt tctggcaaaa acaagtaaca 420 agttcaataa ctgaattcac atcaacaggt ttcattttga tccattagcc aatttggaaa 480 aaagccatat tgatcaaagg gattaaaatt aaaaagcacc ttttccttgc tacatataga 540 ttctttaaac taaaactcca agcagggatc agatacaaaa cccaactgca ggattgtttt 600 tattgactat gacatggact tgttgcttac atttttttaa agtcatcatt tatacagtta 660 tttaaactct attgggcaga aaactgaaaa tacaattgtg agaattatac tccatagtaa 720 atacctatgt acttaatact gaattettgt gteactgaga acettaacee tactetaaga 780 catcttgcga taacctgcaa ctatcaattt tttggagaca tttttggtat ttcggtcaag 840 tgctgaaggg gttttactcc aaaatctagg gctagaattc agcttccaac actctcatac 900 ccaggtaaca caattatgaa tattcagaaa tcaatacctc ttagatcatc aatgtttcag 960 agctatgcct gataaatgac atttgaaaaa taataatata gaaataatta gctgaattta 1020 tactootgaa gocacttoat otttaggott tatatttaca gtgttgtoca ggaggaacta 1080 aagaaaaaag ttacactaat tatttgtcaa gctctattcc agatgtctgc ttaagacttg 1140 cagtttacgc agaggtgaac cattatcctc taaaattaca ccacactact tcttqtaqaa 1200 ctaatagtaa aatacatcaa cccaaatctt atgaaggcag cacatcttta ggagtaacta 1260 gtatataaaa agtatcaaca tcagtggttt gaatataaaa atttattttt aagtcaaagt 1320 atgcaacaaa taaacctaca gaaaacattt tcccatcaca atctqttqct ttaccaaata 1380 atattttgaa aacacattcc ttcagtcatt ataaaqttct taaaatacaa aagaaattaa 1440 atctgtaaga aagtctagta gaccagatgc tgttgtcaag acttgtatgt tggtgttttt 1500 qctttcaqta catcccacgc catccacctc cactcatgcc gccttgccca tagtaacctc 1560 cactgcctcc accaccacgg ccataaccac ccaaaccatc aggagtacca tatcctccac 1620 tgtaattgtt ccccattccc attcttccaa ctgatccata gcctccctga ttatccattc 1680 catctcttcc gtagcctccc attccagaac ctcccatgcc agagccgcct ccaggagtag 1740 aattcaagaa gagttcaata tatcgatgtt gcatgttatt tttatcttta qacatgqcag 1800 ctactgcatc ttcatgtgtc acaaaactct acatctggct ttcttccttg tggctctggc 1860 catcagcttc ccaatatcaa tatgaacttc gtattggatt tatgtggtga gaagaaatta 1920 gcaatgtcat tttcagttgc acgaaaaggc aaccetetca tatgtacgaa atgaccacca 1980 tgaaaacctg aacttgcatc accageteca ccatagecat gteeteceat acctetteca 2040 teteteatte tgteateaaa geeateatte eccatageeg taattattat ageeaceata 2100 gtcatcaaaa cctccataac caccatcata tccatcacct cctcgtcgca ttctgtcata 2160 catacttcca cgcccagctc cataataacc ccctcttcct cctattggtc tatcatatgg 2220 teceggtteg tgteceagea atettettgg tggateataa aateetttga ttteaeteet 2280 gctacttctg aagatctcaa tatacctatt taaaaatgtt ttaaggtaca ggtttcagca 2340 taaatgtatt agtgtaaatt agatactggg caaaatgcag taagtttttc tatatctaga 2400 tacataaccc aatttaaatt gcctaaatac accgtaagtt aacagtttaa acctacaaac 2460 ttaattaaat atttaagttt tacaaagaaa ttagtcacgg aaaacaattc ataaagtata 2520 tttttacttt gtctctttta gtacataata ggtgttttaa aggaaatagg tgattataca 2580 aaagcattta tcaacaacat cctacagaga aatggaaaca atctaatttt aatttaacta 2640 ttagcattaa ttccccaccc aaatctgtag tttccaagtt aaatttagat aattatcaat 2700 tcttttaaac taccccagaa aaatgttatg gctacccccc catttaagca atagtgaccc 2760 acaaccccca aaaataaaaa tttaacacca tcccaaactc tccatcccca cctgtgccct 2820 attettteet tgtgttteec cagageattt tetgetatet eetttgaage aaactgeaeg 2880 aaggcctccc ctgtgcttct cccctggtag tccatcgtca atgttatccc atttggcacq 2940 atttccaacc ctttaaccca aggacaaata accccatcaa ggggaacagt gttaaaggct 3000 3060 aacaaaaaag cttagtttcc catcacccca taatacaaat gaaagatttt ttcaaatatt 3120 actggattaa ataaattttt tgcgaccagt gtaaaaacac tgtgtaatta cacactctaa 3180 aagcccacct atattacatg aaaaaaggct acaaaatcaa atatatgctc catatactaa 3240 ttcacggttc atttcatcac aattctcaaa tatgttactg cacattaatt aggttttaca 3300 tattctacac attctgtatt gaatattaac tggagcatat tattttaata cattaaccaa 3360 gactatcata gttaaactta aaagttccaa aatcaaatgg gttttacaaa ttaaaaacag 3420 taaaacaata caaatataaa attacaatac tactaaactt tgactaatac tagaggtacc 3480 ttgaaagaac tgaactattt cctctttgct gcaaccaaat ggtagtccac gaagtcgtac 3540 tgtcccatca ctagcgtcat ttggaccatt atgtttcata acccaatcca tctcaatacc 3600 gtttgattta aatgcccctt ttacttcaga taccctgtca ggcgatagtt acgccgactc 3660 tggtgctcgc ggggtccagt tcaaagaagg gagaagtcgt ttgcctcgtg tagcgctcgc 3720

```
<210> 5897
     <211> 595
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (105)...(482)
     <223> similar to gil345531 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5897
ttttttttt ttcattttct ccattttatt tgtcaatata aaaatactca aatatttaca
                                                                       60
acaaataaat acgcggggac acaataagtt acactgttag gagccctcct cctagggctg
                                                                      120
gaagagagta tgccattgtc cacagcaggc ccaccctctc ccttctctc cctcacacag
                                                                     180
cettteceag ecetgtacag gaagaaggea agtataaaat accaetgaac eeegqqqeea
                                                                      240
agtgggaggc cccacccacc cttccccca aacacacagg aggctccatc tccctcccc
                                                                      300
caccctgaaa acattcacag ccctaggagc aggattaggc ccaccccaag ccctgcactc
                                                                      360
cctctgaagg ggcacagcac cctgtccacc ccacctccat atgtacatcg ctgcccgaca
                                                                      420
ctcggggcag tgggggtagg agagacaaag tgatacgacc ccttcccctt catagctcca
                                                                      480
atgactcatc aggaggacac atgccatggg aagatttgac ggagaaagga aggctatgca
                                                                      540
cgtacgagca ggtgacatgt acgcaactat aagcacacag aaacccatgt gcaat
                                                                     595
     <210> 5898
     <211> 2921
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(2922)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (358)...(2122)
     <223> similar to gi5912193 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5898
gtggccatag agcagacatc tcttaagatg atgcaggcag taggaggtgc acctgcacgt
                                                                      60
```

```
cccactggag aatatatctg taatcaatgt ggtgctaagt acacatccct agacagcttt
                                                                    120
cagactcacc taaaaactca tctcgacact gtgcttccaa aattgacctg tcctcagtgc
                                                                    180
aacaaggaat tccccaacca agaatccttg ctgaagcatg ttaccattca ctttatgatc
                                                                    240
acttcaacgt attacatctg tgagagttgt gacaagcaat tcacatcagt ggatgacctt
                                                                    300
cagaaacacc tgctggacat gcacaccttt gtcttctttc gctgcaccct ctgccaggaa
                                                                    360
gtttttgact caaaagtctc cattcagctc cacttgggct gtgaagcaca gtaacgaaaa
                                                                    420
gaaagtctat aggtgcacat cttgcaactg ggacttccgc aacgaaactg acttgcagct
                                                                    480
ccatqtqaaa cacaaccacc tggaaaacca agggaaagtg cataagtgca ttttctgcgg
                                                                    540
tgagtccttt ggcaccgagg tggagctgca atgccacatc accactcaca gtaagaagta
                                                                    600
caactgcaag ttctgtagca aagccttcca tgcgatcatt ttgttagaaa aacacttgcg
                                                                    660
agaaaaacac tgtgtattcg aaaccaagac acccaactgt ggaacaaatg gagcttccga
                                                                    720
gcaagtgcag aaagaggaag tggagctgca gactttgctg accaacagcc aggagtccca
                                                                    780
caacagtcac gatgggagcg aagaagacgt tgacacctct gagcctatgt acggctqcqa
                                                                    840
catttgtggg gcagcctaca ctatggaaac tttgctgcag aatcaccagc tccgagacca
                                                                    900
caacatcaga cctggagaaa gtgccatcgt gaaaaagaaa gctgagctca ttaaaqqqaa
                                                                    960
ttacaagtgc aacgtgtgct ctcgaacctt cttctccgaa aatggcctcc gggaacatat
                                                                   1020
gcagacccac ctaggccctg tcaaacacta catgtgccct atttgcggag agcggtttcc
                                                                   1080
ctccctttta actcttactg aacacaaagt cacgcatagt aagagtcttg atactggaaa
                                                                   1140
ctgccggatt tgcaagatgc ctctccagag tgaagaggag tttttagagc attgccaaat
                                                                   1200
gcaccctgac ttgaggaatt ccctgacagg ctttcgctgc gtggtgtgca tgcagacagt
                                                                   1260
gacctccacc ttggaactca aaatccatgg gacgttccac atgcaaaaga cagggaatgg
                                                                   1320
gtctgcagtt cagaccacag ggcggggcca gcacgtccaa aaactgtata agtgcgcatc
                                                                   1380
ttgcctcaaa gaattccgtt ccaagcaaga tctggtgaaa cttgatatca atggcctgcc
                                                                   1440
atatggtctg tgtgccggct gcgtgaatct cagtaagagc gccagcccag gcattaacgt
                                                                   1500
ccctcccggc acgaatagac caggettggg ccagaatgag aatctgagtg ccattgaggg
                                                                   1560
gaaaggcaag gtggggggac tgaagacacg ctgctcttag cttgcaacgt ttaagttttg
                                                                   1620
agtettgaaa gttgaaette cagaaecaca teecaaaeca tteeaecgag gagtttettg
                                                                   1680
nccagacage aacagcacae agttgaaaae geeccaagta teaccaatge ecagaateag
                                                                   1740
tccctcccag tcggatgaga agaagaccta tcaatgcatc aagtgtcaga tggttttcta
                                                                   1800
caatgaatgg gatattcagg ttcatgttgc aaatcacatg attgatgaag gactgaacca
                                                                   1860
tgaatgcaaa ctctgcagcc agacctttga ctctcctgcc aaactccagt gccacctgat
                                                                   1920
agagcacage ttegaaggga tgggaggeae etteaagtgt eeagtetget ttacagtatt
                                                                   1980
tgttcaagca aacaagttgc agcagcatat tttctctgcc catggacaag aagacaagat
                                                                   2040
ctatgactgt acacaatgtc cacagaagtt tttcttccaa acagagctgc agaatcatac
                                                                   2100
aatgacccaa cacagcagtt agtgcaagta cagtctctca aggagaattg attttgtggc
                                                                   2160
acaaaaaggg aacatgtttt actctttgca cgaaactttc attgttaatg tatattattc
                                                                   2220
agaaacattg tattgtacca taaaacttgt attatcaaac tgttggatgt tcatgtgttt
                                                                   2280
gaacttttgc gcaccggata gaccccttgt atataaagtg ttgcacatgt attatgtcgt
                                                                   2340
ctgatactaa aatggtetta taaagacaag tggaettggg ceetatteag geaagattaa
                                                                   2400
aaaaaaaaa aagactttga ccaaaatggc ttaaaataaa gtatttttaa ggaaaaaaga
                                                                   2460
ttaaaaacaa ctgttataca tgagactatg gttggacttc cttttcttta cacttaagcc
                                                                   2520
tagaatttct ctttaggtat atcagcgctt aaatccaaga ctattttta ttgctgaaga
                                                                   2580
2640
gtatatatat atttgtaagc cttgcaatgt gacaggtagc atcactatat atgcaatagt
                                                                   2700
tgttatgtag actgtcaaag aattttttt tccctggata catttgaagc tttgagtgtt
                                                                   2760
caaggttttc cttaatgatt tcacgcagcc aaattcttga atcagttgaa ctaacctgta
                                                                   2820
tgttactgtt attaatgttt actctgcagt ctgaacctgg agattactgg aattgttttc
                                                                   2880
caagaggaaa taaattcagt ttaccattag gaaaaaaaa a
                                                                   2921
```

<sup>&</sup>lt;210> 5899

<sup>&</sup>lt;211> 2119

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1321)...(690)
<223> similar to gi310200 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5899
ttttttttt ttgcaggttt agaaaataaa gtttgttggg atcttaaaca ttttggataa
                                                                       60
aactaacaaa aaaatatgaa cacacattca ggttgtggtg ctatgaggag tagcgtcatc
                                                                      120
ttatttagtt ccttgagata cacgcacggc tgctcggtga tcggtgccgc cctgggaaag
                                                                      180
gttggtcagg aggtgacagg ggtctccagg aggagctcgg gaggtgacaa gggtctccag
                                                                      240
gagggagcag gggctgctcg gccaggctgc cctggagctt gaggataagg tcaaggttgg
                                                                      300
tatgtgttgc tccgacttga gaatgaatta ggtgtgtgac tgtgtggcat cgtgaacatc
                                                                      360
agtagtgacg cagccgtggc ctgggctttg cctgcagcgc acttaggtta cacqqaqcqq
                                                                      420
gatcagaagc aagcgattcg gcacacaggc gtttggccac agcaattagg aaatacatat
                                                                      480
tctgcggcag ggacacgatc atattttggt gtgaagaaga gggcaagaga agcagaagga
                                                                      540
gaatgggtcg gtaggtgtga aaagtgtttg gcatgcatgg gattaaacag aaaaggtgtg
                                                                      600
gctgagattt cccagtggtg ctcacagtgc atggacagcg cqqqqtqqqq cacqqcqqqc
                                                                      660
ttcacacagt tctgtccgtc cctgagtgct tcctcaccac cttgcctccg ttcacctggt
                                                                      720
cgaccgccag ggtcttcacc tcgggctggg cctgcggcgg ggtggcgtgg tggatccgat
                                                                      780
gtgccacccc gacgtgggcc ttgtgcggct tttcgcgggc cgggctqtqc tqctcqccqc
                                                                     840
ttcggtcgga ggcgatgggg gggatgacga ggggcctctc tttgatgagg tggacctcqg
                                                                     900
cggactccct agccagcaga aatggggtgg ggtcgggcat agcatccact ggttcccqca
                                                                     960
aaaggagttt cctgctctct gccccgaatc tgtagacctc ttcaaattcc gggtgcaagg
                                                                     1020
gggctgagag gctctttttc atgcggcggc gaggcqtttc qqqtaqcttq tctttqqqqq
                                                                     1080
gcgctggctt gtagctggcc agcacggggc tccctgacgg gctggcatct gaggtcccgc
                                                                     1140
tggagctcat gagcttcttc ttggcggcgt gcagctggga ggtcaggtag gcgatggtgc
                                                                     1200
tggcccgctg ctccagctcg ctagacagca gggtcagctt gtgactcttg gccttcagct
                                                                     1260
cctccaggta cttcttctct cgctccttga tggtgttctc cagcactgtg atcatcqcqt
                                                                     1320
ttttctqctc cagttctttc aacaactcag cattttcqtt ctctttcact ttcaqttqqq
                                                                     1380
cttccagctc ttcacatctt ttctttaatt cactgctttt agaagtcccg tctcctgtct
                                                                    1440
gttccgaact tttgactgtc agctcatatg ttaaatctgt gcagtgctqc tqcaqccqcc
                                                                    1500
tgatctcgga gtgcagcccc ttgagcgtgc tggcatgctc ccgctgaagg aacaggaggt
                                                                    1560
tcttctgtgc gctgtgcagc tggttctcca ggtttgtggc tgccatgctg acatccagag
                                                                    1620
gaccttcatc gtaactcgag aaatgtggtg aagtcatggg tctttctgga aaagctacca
                                                                    1680
gagtaattca agacgcttgt acagcactga aaaatactga ggatgaaatg tgagttattt
                                                                    1740
gcttataaat tattattgta aatacagaac ctcaqaatqc attttcccta atttqctatt
                                                                    1800
ccaqaqaacc ctccqtaaag gaggtacaac ttctcaatgg ctcccaggac gcagcccatt
                                                                    1860
tgtaggatgc cacagtggaa ccgttttgga qacactgaca cacccaggct gtcactgctt
                                                                     1920
cagacgacac caattgctca tcaattatct gtacgaccag tgacatgcat gcacactagc
                                                                     1980
tctggagcta ggacgagttc ataacgaact tcagacatac actttcatca cacgaaaaca
                                                                    2040
                                                                    2100
cttcctgggc gctgctccgg tggaaagcca cagactccac tccgagggca acctgagaac
gcagagaagg aaataaaac
                                                                    2119
```

```
<210> 5900
```

<sup>&</sup>lt;211> 1781

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (273)...(544)
<223> similar to gi2664281 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5900
teeggtegae gatttegteg eeattttega gtgatgeetg ateteateaa tetageggga
                                                                       60
gagacaggat aacctgtccg agagtatagc gccactatga ctccgccgga aaaattactt
                                                                      120
taaaaatcgc caaaaattac ttggagcaaa gggcagtcgg cggagcttcg ccaaggctgg
                                                                      180
cgcagtcggt tttgacctgt agcagagaac caattctgga gaacagcctc acttctttga
                                                                      240
ttgaatactt acataatgca ttggaacatg acatgagatt aaggtttaat aatgatagaa
                                                                      300
tgaagaccac aataaaagag acctctactt agctcagcaa ttcttacctt gtttttccct
                                                                      360
tgatgtgaag tcttacctat ttgatgaaga tgtcttttga aaggtgtact gcaaggaaca
                                                                      420
aaatgtttgt aaattctcct tttaccaagg tggataatta ctgtaccttc ctccatggaa
                                                                      480
aaagttttat ttaaagtgtt atttctcatt gaatactatc aaaaaggaaa aaaaaatgac
                                                                      540
ctaaactttt gagatagatt tggctctagt aagtatttag ttatatcact tgcatatctg
                                                                      600
ggagaagaaa taagagacta tcatcagtac attcccatct actaaaaaaa tttattttac
                                                                      660
acatgtcaag ggattactta taacttccat tttattacta atagcttgaa cccttttaat
                                                                      720
gaagacctaa ctcctccacc agaaatttaa gtttatgttc ttactttgtt tacttataaa
                                                                      780
atacatetea ggtatttegg atgtettttt tttttetaag eetatatgaa atgaaaaata
                                                                      840
tattggcaaa gtaaatgttt aaacctttta cgttaaaatt actttgaaag atgaaaagtt
                                                                      900
agtgctgttt ttgtcacgtt atactgaaat taaatgttta taatttatat tttgggttta
                                                                      960
tgtataaatc atggaattta tgcaaaaata tgagtagtac agattctcct ctaattctgt
                                                                     1020
aggactttga ataatgtgat atttttctta taattggacc cttgtgtttt gaagaaatgc
                                                                     1080
caactgcttg aagaatctcc ttgttatttg tattatttgc tatagggtta gatgttgaga
                                                                     1140
aattotgotg acaaaaaatt ttaagocagt tttacactaa atgttootca gtotgattaa
                                                                     1200
tttgttattg gatgtattct gtatctttct tttgtaattt gtgactttta tccacttagc
                                                                     1260
acgaatgatt ctattaaaga aaatcattag gaagtggtag aaactttaaa tcgccccaga
                                                                     1320
gtttgcctgt ttccatattt tattatctta taatcttcgg gagtgcttac acttatggag
                                                                     1380
ctaacatttt cagagataca gcttcttata gtaacactaa aactttcttc ctctttggac
                                                                     1440
tgaataccta taattataac tatatggtag tttaagtttc cttgtgatta gtcaaaaata
                                                                     1500
ccattttagt atgaagcaat gaagtctatt atttgttgtc ccataattga gaaagcttaa
                                                                     1560
atacaccttt tattaagagt ttgtaaattc tagcttagtc tacacagatt tttatatcaa
                                                                     1620
tttgtttata tttttattaa tgtcatttct ggaagtgtga aaatgttaat gttcaacaag
                                                                     1680
caacattaaa aatagatttg aaacatttat atatagagag gtacacattt atttactgtt
                                                                     1740
taggtactga agattatcac ttaataaaaa atatatatcc c
                                                                     1781
```

```
<210> 5901
<211> 2876
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (403)...(2758)

<223> similar to gi5679576 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5901 tttcgtctga cacgcacgac tccccccgcg gcaactgcac gggttcggtg acagccgaga 60 cgccgagtgt ttcccgcagc cggccggggt ccaggtcgga aatgtagcca gtggggccgc 120 cagcatccag cacagtgage ggcccctggg caccaccaga aaacatttgt gggtgaacgt 180 ggagtgatga ccatgtggac actgtctttc cagggtttct tggagcctct gcagagtctg 240 ggggccaggc ttcttagtgg aaactgcagg atcttccttc tgacccctqc ttqcctcqcc 300 ccagcagctc cggttgagtc cacagatgcc agctcagctt ccagcttgqg qaaqaqtqqq 360 gttgtcagca ggagagcctg agggctgagg cccagcgtga acatggcagc taatggggac 420 tetececcat ggteecegge eetggetgea gagggaegtg geageteatg tgageattga 480 gtcgttgcag gcttcagtgt catttgagga cgtgactgtg gacttcagca aggaggagtg 540 gcagcacttg gaccctgccc agagacgcct gtactgggat gtgacactag agaactacag 600 ccacctgctc tcagtggggt accaaattcc caagtcagag gctgccttca agttggagca 660 aggagagggg ccatggatgc tggaggggga agccccacat cagagctgtt caggtgaggc 720 tattgggaaa atgcagcaac agggaattcc tggaggaatt ttcttccact qtgagagatt 780 tgatcaaccc ataggagaag attcattatg ttctatttta gaagaactgt ggcaagataa 840 tgaccagcta gagcaacgtc aggaaaacca gaataacctt ttaagtcatg tgaaagtatt 900 gattaaggag aggggctatg aacataaaaa cattgaaaaa ataattcatg tgactaccaa 960 gcttgttcct tcaattaaaa gactccataa ctgtgacaca attttgaagc atactttaaa 1020 ctcacataat cataatagaa acagtgcaac aaagaacctt ggcaagattt ttggaaatgg 1080 taacaatttc ccccatagcc cttcctctac taagaatgag aatgctaaaa caggagcaaa 1140 ttcctgtgaa catgaccact atgaaaaaca tctcagccac aaacaagctc ccacccacca 1200 tcagaaaatt catcctgagg agaagcttta tgtgtgtact gaatgtgtaa tgggcttcac 1260 tcagaagtca catctgtttg agcatcagag aattcatgct ggagaaaagt cccqtgaatg 1320 tgacaaaagc aacaaagtct tcccccagaa accccaggtt gatgtacatc caagtgttta 1380 1440 cctcattaca catcaaaaaa ttcataccgg gcagaaaccc tacaaatgca gtgaatgtgg 1500 aaaagccttt ttccagagat cagacctctt tagacatctg agaattcata caggagaaaa 1560 accttatgaa tgcagtgaat gtggaaaagg cttctcccag aactcagacc tcagtataca 1620 tcagaaaact cataccggag agaaacacta tgaatgcaat gaatgtggga aggctttcac 1680 aagaaaatca gcactcagga tgcatcagag aatccacacg ggagagaaac cttatgtatg 1740 cgctgactgt gggaaggcct tcatccagaa atcacatttc aacacacatc agagaattca 1800 tactggagaa aagccgtatg aatgcagtga ctgtgggaaa tccttcacta agaagtcaca 1860 actccatgtg catcaaagaa ttcacaccgg agagaaaccc tatatatgta cagaatgtgg 1920 aaaggtcttc actcacagga caaacctcac cacacatcag aaaactcata ctggggaaaa 1980 accetatatg tgtgetgaat gtggaaagge ttttactgae cagteaaate teattaaaca 2040 ccagaaaact cacactggag agaaacccta taagtgcaat ggctgtggaa aagccttcat 2100 atggaagtcg cgcctcaaaa tacatcagaa atctcatatt ggagagagac actatgaatg 2160 caaggactgc gggaaagcct tcatccagaa atcaacacta agcgtgcatc agagaatcca 2220 tacaggagag aaaccgtacg tttgtcctga atgcgggaag gcctttatcc agaaatcgca 2280 cttcattgcg catcatagaa tccatactgg agagaagcct tatgaatgca gcgactgtgg 2340 gaaatgette actaagaagt cacaacteeg tgtgeateag aaaateeaca caggtgagaa 2400 gcccaatata tgtgctgaat gtggaaaggc cttcactgac cgatcaaatc tcataacaca 2460 tcagaaaatc cacactaggg agaaacccta tgaatgtggt gactgcggga aaaccttcac 2520 ctggaagtca cgcctcaata tacatcagaa gtctcatact ggagaaagac actatgaatg 2580 tagtaaatgt gggaaagctt tcatccagaa agccacacta agtatgcatc agataattca 2640 tacaggaaag aaaccttatg cttgtacaga atgtcagaag gcctttactg acagatcgaa 2700 tctcattaaa caccagaaaa tgcatagtgg agaaaaacgc tataaagcca gtgactgaga 2760 aagtottcac otggaaatca caactgggta tgcatcaggt atctaatagc agggaggagg 2820 aaggcctgtt gctgcaatca ttgtacaggg ggaaatgggt atgagagact gaggct 2876

<210> 5902

```
<211> 802
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (632)...(209)
     <223> similar to gi3786408 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5902
ttaaagtgtg aatatttggg gaacacagac caaggctgtg ccctgatttt ccctttctga
                                                                        60
aagtcacact ttaactaaaa tatttctgtt ctacaaattt ccatatatca aaaaaaagct
                                                                       120
gtagaattta attcatagtg tcttctcaaa aggaagagga aaacaaaaac agttcttcgt
                                                                       180
aggagtettt tattttttgg tgtettaaat gteaatgate acaaaaaett eegggttete
                                                                       240
ttcattatag acctgcattg ctgaatatgt tattgctttg acttctgttc cctgagggtg
                                                                       300
cttggacaat gaaaattett eteceeacee ggggtatgaa gaatteatea geactgaact
                                                                       360
tataaagcca ttcatccaaa aagtgaaaca gaagagactg taagtcatct ccttgggttt
                                                                       420
ctacttctac tgtttggagg ggctccactg tcccagtatc tgtcatgtaa ccaaacatgg
                                                                       480
ccattgcaca ttgctcaaat gcttcctcca gagtatctcc ccatgcgtgt aaccaagatt
                                                                       540
gaaacattca gtcttcctac tgacgtggtt tcaaaggaat gaactcccgc tatactcact
                                                                       600
ggacatctgc tgtatgatcc aaatatgtaa agagagaagt aagccaccta ctcacactcg
                                                                       660
tacttcctat tgactggcgg atacttggcc ttgatcgcct tctgttcttc agtcaaattg
                                                                       720
taatctctgg catcttcctc ttcctgcgcc atgactgcag gattagaccg gcacqagctc
                                                                       780
gtgcagagtt cctcaaagcg tt
                                                                       802
    <210> 5903
     <211> 2805
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     \langle 222 \rangle (2788) \dots (243)
     <223> similar to gi299471 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5903
ttagttattg ctgttaatct cctactttgc ttgatttatt gatttattta ctgagatgga
                                                                        60
tettgetetg ttgeetggge tggagtgeaa tggegegate teggeteaet geaaceteeg
                                                                       120
cctgccccac ctcgggttca agtgattctc ccgcctcagc ctcccgagta gctgggacta
                                                                       180
caggcatgca ccaccacgcc cggctaattt ttgtattttt agacgagaca gggtttcacc
                                                                       240
ctgttggcca ggctggtctc aaactcctaa cctcaggtga tccaactgcc tcgqcctccc
                                                                       300
aaagtgetgg gattacaggt atgageeace gtgeeeagea gaatttttta aetatttggt
                                                                       360
tacgactaat ttggataatg tagtgcatgc agctttgatt tgtgccacta agagtgggca
                                                                       420
aactgtette etttttgtga atcagtaaaa atttteeete aacatgtgtt tgacagttgt
                                                                       480
cattcactgc taagttaagg catttggtaa accacacagc ctctgcatcc ttcctagcga
                                                                       540
```

```
cagccacaag aaaaggtggg catgggaggg aaaatgctct tgtgaattga actggaggca
                                                                      600
agctccactt ttctttagaa aaagatgtag atcaaaataa ctaatatttt cttccttqct
                                                                      660
cgatttctgt gccttccatg gtacatcaaa ataataggac cagtaatggc cacaatcctg
                                                                      720
ttgactgctg ttaccttcgc cccaatattt ctttaagcat ttcttaagca tctagcttgt
                                                                      780
gttttgttat atttaacaga ttttcttaaa gtattgtatg aattaaaacc agaaataact
                                                                      840
tcattttcct agaaagggat aatttctccc ggagaataaa tcctgaggat ttagttagat
                                                                      900
gctgtgggta ttgtatttta aataatattt taatqqqaqc aqctqattqa ctttcaaatq
                                                                      960
gattgtttac attaatagta attctgcagt tgttttacta ttgcatcagt ctgccagaca
                                                                     1020
agttccatgt gcatatttta attcagaact aattatactt aaaaatttaa accctgcata
                                                                     1080
cttccccaaa aatgtttagg gcagttaaaa acaactcttt tggaagatga ctcgcatttt
                                                                     1140
aagaaatgag agaacactgt caaatgatga atgcatttaa aaaataattt gcaaagtgat
                                                                     1200
aaaagccctt agttttaaat cttacaatga cattagctct tacaagaact cagtaagtat
                                                                     1260
ttgctgtttt ttaatgggat agtaataagg ttgaggtttt tgttaaggga cgtttactta
                                                                     1320
tcatcaaact ctatacttac tactacaagg aaactccaag tacattaaac actatgtttt
                                                                     1380
ataattettt gecacaetge caataaatte tgtteacatt ttaaggatga caagteeact
                                                                     1440
atatgtaaca cgtaagaatg ctatcctggc agtagacaca gggccagaat aaactggcaa
                                                                     1500
qttttcattc cacacaagtq tqqqaaaaaa atqactacaa cttaaacttt atttacttqa
                                                                     1560
ttgagagctt attgcacatg aaatgtttta tgtggttgat cttaacttcg tttacattga
                                                                     1620
cttctatgct caagattgtt caattgctgc tgctgccgtt gtgttttctt tcaggatcga
                                                                     1680
ggtgggtacc ttcatataat atcttctttt taatttcttc tctggcaatt ctttcctgga
                                                                     1740
ttctttgctt tgcataatta tacctacaat gaaaccagca tcccaaaqtc accaaqataa
                                                                     1800
accetectae tecaacatea catgatette taattetaet agtgaacaaa aaatgtecaa
                                                                     1860
agccagccac aacagateet aatgaaceat acaatattga atgeegggeg cagggagtat
                                                                     1920
tttcaacatc taaaaatcct aggagcttaa gggactagaa tgaaaaaaaa gaacctagat
                                                                     1980
tgagtaagaa agtatttcat tttggggtgc tttggcaaaa atgacaatac accatttctt
                                                                     2040
ttcttgtagt tgagggttta aactagagta tgtgccacgt gacaacctaa atcagcttgc
                                                                     2100
gttgtctttg tccacctttg gtatgcagtc tgaatcttta aatccgaaaa ccttacaaat
                                                                     2160
tggaccggaa aacccttaag cagtagggta acttggagct gtatcttaat ttgctaatca
                                                                     2220
actgacttgg aaataggata attcatttta tgagctcttt aaatgagttt atttgggaat
                                                                     2280
atgcctatca ttggaattga aagcagcata gcttgcttca gtaactccaa taatttggga
                                                                     2340
agcagaaatg gaaaaagtaa tttgagtcat gtttgcttat gtagtgccgt ttaaaattcc
                                                                     2400
cctagtaatt acctttcata ttttattaac taggttaaca tcaactgtgg ttgtaagagt
                                                                     2460
aaatgtttca ccttaagata aacatgggca atatattaaa ctctagtctg ttttcttgcc
                                                                     2520
tgtgaagtga ggctgcactt gattatattt qattctttqt tcqtaataca tqqqaacqac
                                                                     2580
agctaagtgt ggtgaaaaac gcggggatcc aaagagctgg atttttatct cagatctgcc
                                                                     2640
gctaactttt gtatcctata ggctactttt atttctatgg tctcaatcta taacatgaat
                                                                     2700
gggttgggtt aaatgactga agttccttca agtgctaaaa ttctttttct acagtcttca
                                                                     2760
ttggatttat gtatttctta ttcctaatat gtttaactgg ggatg
                                                                     2805
```

```
<210> 5904
<211> 2765
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (1927)...(735)
<223> similar to gi412941 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5904 ctgcagcctt gacctcccag gatcaagtga tcctcccacc ttagcctcca gagtagctgg 60 gaccacaggt gtacattttt taaaagtgtt ttgtagagat agggtctcac tatgttaccc 120 aggctggtct caaatgcctg gattcaagta atcctcccat ctctgcctcc caaaagtgct 180 aggattacag gcgtgagcca ccccgcctgg cctgaactac tatcttttat tqtcttcttc 240 actatccccc actaaagcag gttcctggtg ggcaggaact cctcccttaa cctctctggg 300 cttgtttcct cacctttaaa atgggtgtta tcagagtccc tgcatctcag agtgttgcta 360 tqqtqactqa atqaqttcat taatgtaagg cacttcaaca gtgcccaagg tgctcaataa 420 atagatetag etacagtagt gttececaet ggteeectgt geettgatge egggeaaagg 480 aatagtgcag acaggcagga ggaggcagag agggagagag agggagtggg aqtqqqqqaa 540 cgtcagggat ggagacccca ggcaggcgcc caatgacaca gagatccgca gtcctctctc 600 catctttaat ggggccccag gtgggcttgg ggcacgggtg tccttaaata cagccccat 660 gggcaaggca gcgggggcgg ggcggggtgg ggccgggcct gccggggcgg ggcggggcqq 720 ggcgggacct cagctgcact tgcaggagcg cacqatcatq ttgqacaqct qctccacctt 780 gggcttgcgg cccacggtag tacacgatgg gcagggggtt ccagcgcctg cggcacgcag 840 caccggcgcc gccgaagcgc cccggtttat gcctggttgt acagggccag gaccttgctg 900 tactgcgtgt ccaggctcca aatgtagggg cagggcccga gggcagaagt tggcatggta 960 gcccttgggc ctcgtggaat ccacttccca gccgaaggtc cttgcggaaa atcaaatgtt 1020 aacaatgccg caacgcaagc aattccttcc tccgtggaag ctgaaacaaa taattggtgt 1080 eccagggeet ggeggtgeeg ggaagetttg cagatgetgg geceteteea geggggtgge 1140 catgagaagc aggaaaggcc ggttcatgcc atgaatggtg gccaggtcac ctcgggcggc 1200 cggtagtgaa cccgttgatg tccacttgca gtgtgttatc cctgctgtca caggagcagt 1260 gggcgctaag gcgaaagccc tcaatttccc ctccacggct caaccactgc cgcacaactc 1320 cggtgacatc aaaagataac cactctggcg agtcgctggg tgccagcagc cggttgctga 1380 ggtatcgcca ggaattgttg ctgtatttct ggtacagctc cacgtgctgc tccactttta 1440 acttgagcct cagcagacgc agctctgccc gggagagcaa cacgggttca ggtaccgctt 1500 ctcggagctc tgatgtgttg aagaacatat atatgctgtg tgtactctgc ttgaacttgt 1560 catagatttc gttgtgggtt tccaccatta gcacgcgggt gacctccttg gcgtagtagt 1620 eggeeteagg etegggetee ggttetgeae teteceegge caceeggteg egggtgetgt 1680 tgtacagggc gagcacggcc tcgggcagcg ggccqqqcgg cacctcccc tqqctcqqqq 1740 ggctggcgag ccgcagcttg gacaggatct ggccgcggat ggcctcgatg cgcttccgct 1800 teaccagete catgtegata gtettgeagg tggatagtee egeggeegge eggeeaggeg 1860 tcagcaccag tagccacagc agcggtagca gcagcggcag cagccgcagc ccggagggcg 1920 gcatggggga ggcggcgcc cccggcactg ccgagagcgc gaacagggct ggtgtggtqg 1980 ggaggccccg cccctgcagg ggctgggggt ctcccggcaa aaggtaggag ggcctcgagg 2040 gaaagctgag gctcctcagg gagaagggcg cagtggtgga ggggaggctt ggaccggggg 2100 tgtctcagta tcccacggaa ataacctaga tgggcgcgat ctggtaccag aaggtgggtg 2160 gtcttgaata ggggatctgt ggcaggtcgg agagagatcc gtctcctgga ggagaaaggg 2220 tetaggatge gegggggete aggagaeagg eeggggatga aggeggegtg eagggggtge 2280 gcccgaggtc tggggaaaag tctttgcggg aggccgggtc ggcgactccc gagggctggt 2340 ccggaatggg ggcgcctgag ggacgccgtg tagggggcag ggagggagca agcgtccccg 2400 gcggcaaagg gaggcggtct ggggtcccca agtcctgcct cctcgcgggg caqcqtcqcq 2460 ccaagaggtc cccgcgcctc cggctcccag cggcaacgga aaagtctcaa aagtttttt 2520 cetettetee egaceagete gteeeteete eegeteetee teeeceteet eeegeagtg 2580 gcgggggcgg cggcggctcg tctcagactc tggggcctca ggctgctcct cggcgactcc 2640 2700 ttcctccgct ccgggccgag gccggccccg cgggcggctc agagccgggg ggggtgcccc ggacggggcg tececetge eeeeggecgg ggeeeteget gtetggetge teegeggagg 2760 gaggt 2765

```
<210> 5905
```

<sup>&</sup>lt;211> 1874

<sup>&</sup>lt;212> DNA

<sup>&</sup>lt;213> Homo sapiens

```
<220>
<221> misc_feature
<222> (1)...(1875)
<223> n = a,t,c or g

<220>
<221> misc_feature
<222> (1829)...(1817)
<223> similar to gi5566244 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5905 ttttgctcca agcgaattaa atggggaacc cccggggttt tcccctcccg acgttqttaa 60 aacccgggcc cggaaattga ttttgggggc cccaaaaaaa aaattttacc ttqccaqccc 120 ccggaaataa aacttgattc tttaaaacgg ccccccttt ttttttttt tcacatgtgt 180 aacatttatt atattaatac ttaacaaagc cctccaagac ccaggctccc cctaccccct 240 accttgggcc acgtcttcat cttagtcttt ggagagaaag ctctgaagtc aagtggtgag 300 ttttccagaa caagtggttc ttctccttga tgacggccca gtcctcaaag ctgtcgatgt 360 gttccttcag ccgcgagcag agctgcacgt tgcccacgta gtccaggagg acatcgatga 420 tgggccccgc ccagcggctc acctctgggg cagatacgaa ctcacagaac tgcaccacgc 480 tgggctcctt gtcggccgcg ggcgcgtcgt tgaacctqct gqaqqqctqc qqqqccqqcq 540 ggtgcgggcc gttgccgtag aggcatgaga agcagggctc gccqtcqcag cccaqgtcca 600 tgaggaactt gagcagcgac aggcacttca tggcgaacat gatggtggcg gggaaggcgg 660 tggggtgcgt ggcgatatag gcgtcgatgt tcgcgccgtg gtccagcagc agctgcattg 720 tgcgcaggca gccgtggcgg atggccacga gcaaggggct gatgacgtcg cgqttggqgt 780 eggegeegtg ttgcageage ageteggtgg egtacaegtt gttgttgace accqcqaaqt 840 acagegegga getgegeegg tettegtaga ggegegegeg etegggegee ageggegtgt 900 tcacgtcgaa gcgcgcgctc agcagcgcct ccagcacctc gtcgtggttg cgctcggccg 960 ccaggtgcag cggactgacg ccgctacggc gtatgcgcgt gcggctggtc accggcagca 1020 qcatctqcac qatcctgtag ttgcccttct tggaggcgat gtgcagcggg agcaagccgt 1080 ccttgttggt cttgttggcg tcggcaccct gtgacaqcaq aaactccacc acctcctcat 1140 geteattett geaggeeteg tagagggeag acgegttgte getggeetge gtgttgatgt 1200 cagcaccgta cttggctaag aacctcaagg cctccaactg tccactctgg gcggccacga 1260 acaaggggct gatgccgtag gcattcttgg attccacctt ggctcctccg ctcaccagga 1320 tctgcatgac ctccaggtca ttgcgagaca cagactcgtg cagagcggtc cagccgcggt 1380 tgcagcggtg gttggtgtct gcgttgtgct gcaccaagaa tcttcacggc ttccgcgttc 1440 ttgcqctcac aggctttgta gagcggtgtc tctcgggatt tgttggagat gtccggctct 1500 gcccctgctt ggagcagtga caggagacag tccaggtggc ccctqcacqt tqccaaaqta 1560 aacggettgt tteeteetge agggtgeget ggtegatggt ceettgggta egetegetge 1620 aggactttca ggcagcccac ctggccatag tatgcggcct cgtgcagcgg cagccagccc 1680 teettgttgg getetgegag attetteeet teettgatea tggtetteaa ggeetettea 1740 gtcgccatcc ttgatggcct ttatcaaggg gtccgcaggc gccagctggg aggtcttgaa 1800 caagetgetg etgtatttet geatgacece ttggaacagn eecattggge eegggeegge 1860 qaactctcaq qaqq 1874

```
<210> 5906
<211> 2838
```

<212> DNA

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (2769)...(353)
<223> similar to gi4995641 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5906
ttttttttt ttgactgttc atggccatct ttattcccag tgctggctat cccaaaatac
                                                                       60
tgccaggcca cagccaaccc ccacctttgc caatgtgact gggtcaccac cccatacacc
                                                                      120
aaagcageet tgageeetge eecaeeeeet geeetgegga ageeaagtee eeagetataa
                                                                      180
aaccctgccc ctcctggtgg cccaggaccc tcaaagatgc acacaggggc cccagcgagg
                                                                      240
ggcccctccg tcattagcct tctcctccag gctgggctgc caagcagcct ggagctgagt
                                                                      300
ctgtcccttg gacgctgggc cacgtcacct tctcctccag aaggcttcac ctatgggccc
                                                                      360
aggaagtcct ccttccgata gcccttcgcc cggaagtcac ggtggagctt gttgtactgc
                                                                      420
cacaggttgg ccaggaggct ggatgctgcc cgggaggact tctcactgtc ggggctgtcc
                                                                      480
cgcttcttct tgatgaagat gagctttcgg agtccgtcaa aatacagcag gtctcgggca
                                                                      540
agcgaatggg gctggccaac caacccaggt tgttgaacac agctatgaat gttgaaccag
                                                                      600
cacctcggct gggggcgact tctcacccac gctgcctggc agcttctcga atcaggtggc
                                                                      660
tocaccacct togtggacat ctcgtccttg ttcctagcgt tccgagacag gtttcggatg
                                                                      720
aggccagtca gtgagcgcag ctggtggtgg tcggcggtcc tgacacggtc tagcaggggg
                                                                      780
ttcagaatac gctcctgctc cagggccagg cggcttagcc ccccggccc ccttgggttc
                                                                      840
gestagedtg atgitetgea gegeseegge ggesgestes gtegtgtges ggttgagete
                                                                      900
gcagcgctgc agcagccggt tgtacagccc cacgatctgg gggctccaca gccactcgag
                                                                      960
gcccttgggg tccttggaca cctccgcgaa ggtgagcgca tcggcggcga ggggcagctc
                                                                     1020
gcgcagccgc cggctctgcg gcgtgaagca gcccacgacc tctcccggcg gcgcccccgc
                                                                     1080
caggicectg eggeegea cetecageeg etgeagegeg gaeggeggea tetegtegta
                                                                     1140
gaggeggtag gaeaggttee geaggaegea caeegegtte tecaegetet tgteetegea
                                                                     1200
tttgcccgcg tccagggcgt ggttgataga ggtgaccagg gcgtccacca gcccgtggca
                                                                     1260
ctcccgcatc ttctggcgag tggcctgaga ggctgagctg aggttcctgg ggaagccggt
                                                                     1320
ggcgttgtag aagatctccg cctccgaggc gttctgctgg atgagggggg ggacccccag
                                                                     1380
cccccgacaa gggggctcaa acaccaaggt cttgtgagct gcttccagcq gtgtcttctt
                                                                     1440
ggccaggcgg tccttcaggt ggtcgctcgg atgaaaggtt ccacaggatc cctgtgacat
                                                                     1500
ttttgcgaag ctcatcatcc tgctcccgca gtgtccgcag cagctcgaag atcccgttct
                                                                     1560
cctccaccag ggccagcttg ttgtcagcgt tgtcgtagat gaggttgcgc atggcacctg
                                                                     1620
tggcatggcg ctgcacttcc tggttggcgt ggttgaagag cttcaccagc ctaggcacgg
                                                                     1680
cctgaaggct gcgggcctgc ttcttggcgg ctgcatcgct gtagcacttg tgctggatgt
                                                                     1740
aggccgctcc cagcacctgc aggttggggt ctgaagccat gaggtacttg actgctgagg
                                                                     1800
gcaggtcaat gtcatcaaaa ccgctgctga gtctctgcag ggttcggtgg ctaccgtagc
                                                                     1860
tgttgaaccc atgcacgtcc ggcaggtggc ccgagtcagc caggctgagg ctgaggctgc
                                                                     1920
gcacagatgg cgctcgagcc actggctcca ggacggcccc cggcactgcc ccqcctaccc
                                                                     1980
egeggeteeg gtggetgete tggaateget geagggteeg caeggeaggg geaeggatgg
                                                                     2040
teeggetegg ggaaacetea gtggeetegg geeagteeag eeeeetgee eggetggage
                                                                     2100
tggagctggc ctggcgctcg tacgcaaagg ccctgtaggt ggaggtggcc gcaggctcca
                                                                     2160
gctgctcaga caccaggctg tagcggtcgt ccaggccccc gggccccagc cgcagcgagc
                                                                     2220
gcagggagag tgtgtcatag tcggcccggc tcccaacccc accgcgctca tggaaggaca
                                                                     2280
cgggcctggt gggcatggga ggggtgggct gggcaccccc gtacccagcg gccccaaagg
                                                                     2340
egetgeeece gttgtggget gaacteagee teegaetgea geteagatee aeggeggage
                                                                     2400
gggaggacca ggaggctggg ctgtaggccg gcttggcgat gggccggaag cccgaggtct
                                                                     2460
tgtccccact caggccctga gagcgagagc tgaagccagc ctgcagggtg tggtactgcc
                                                                     2520
ecctggatgt geetetggea gteteggeet eaggeteggg eteageggee eegttgtgee
                                                                     2580
gcggctgctg tcccagctgc aagaggcggg cgcggacctg ctcctggacg cgggctgccc
                                                                     2640
gcagccgctc ggcctccggc ccctcggcgc cccggcggtc cagctgcagg tcagagggca
                                                                     2700
gcgccaggga gcacacgccg gcctcaggct gcagggccga cagcaggaag ttaccgtcct
                                                                     2760
```

```
gcatggcggc aggtccaccg ggcctgggcc tggcggccgc ctccaaaccc aactatcttc
                                                                     2820
acgtcctgtc cggaattc
                                                                     2838
     <210> 5907
     <211> 873
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (382)...(694)
     <223> similar to gi4769004 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5907
gaatctagga cattctatag agcctggatt cttcaaaaaa gtcatacaca cacacatg
                                                                       60
tacgtacacc ttaatttata agatagaaat caaaagaaac tacagagatg aacagcccaa
                                                                      120
tgcaaggcat gcccttcatt gatttctgga tttttttaag tcataaaaga tatttgggag
                                                                      180
tcacttaaga aaattagaat gcaaactgta tattaaatgg cattatggaa ttatcattac
                                                                      240
ttttcttagg tgagataagg atattgtaat tatacaagag atgtccttca tctaggagat
                                                                      300
ggctgctgaa gtattgaagg gtaaagtgtc ctgtgcttat aactggcttt caaacagaca
                                                                      360
aacaaaaaa gctggtccaa aatggcagtg gcaatggatg cggatacccc aagaagtacc
                                                                      420
aacagcagtg ctttgaagta aaaaagtgaa atgcagtagc tagccctctg ggcttgggat
                                                                      480
gttgtggtta ataactgtgc catctgcagg aatcacagca tggatctgca ttgaatgtca
                                                                      540
agctaaccaa gagtctgcca cttcagaagt gtgtaccgtt gcacggggag cctgtaaccg
                                                                      600
tgcttttcac ttcactgtct ctctcactgg ctcaaaacac aacagctgtg cctgttggac
                                                                      660
aacagacaat aggaattccc aaagtatgga caccagaaaa agaattcttc catcaagctt
                                                                      720
aactgttttg tgattcattt aatgacttgc ccttctgtca cttaattata aattagatag
                                                                      780
aactgtgtct tttctgcttt gtctttgcca tttgctgttc tcgcagccac attgtattct
                                                                      840
gtgtcaaata aagtccagtt ggattctaga gcg
                                                                      873
    <210> 5908
    <211> 1316
    <212> DNA
    <213> Homo sapiens
    <220>
```

<400> 5908

<221> misc\_feature <222> (886)...(224)

<223> similar to gi296669 in the genepept database release 114.

Run with FASTXY 3.3t00, default parameters

```
tttttttttt ttggagaagg aaatcgtctc aattgtttat tcgactcaca gtcagtgcac
                                                                       60
acactctacc atccaaaagt cgaagctgtg acaatcgact gctacaggca gtgcatggat
                                                                      120
gtgtaaacaa acacaaatga aaatgcaaat cagagtgggc ggggccaagg cccactgtta
                                                                      180
cattcacagc acagggtaag tgcaaaagaa caggatgtca ggatggggg cggggagcac
                                                                      240
agggtccttc ctgccctgga ggctgcctcc aggcatcagc ctgggaggtg ggttagtgcc
                                                                      300
catggaaccc tectgeecag gaagetgeet eegggeatea geetgggagg egggttagtg
                                                                      360
cccatggatc cggtgtctgg gaaggggccc acagaagatg ggccacaccc agcatcatct
                                                                      420
cetetetgtg gtgcgccctc ccatecccag acceetttec catteagggg agagggccc
                                                                      480
tgqtcacagg agccagtcct ctgacctcct gagtgtggaa acccaggagg ggagtgttt
                                                                      540
tetectgeag geeteteaac etggaaaggg eagageeaca geagaaegeg ttggggeeac
                                                                      600
agacactege teaggtgaag acactgagaa gacactgeeg ggetgaeaga accegeggeg
                                                                      660
ggggaacgcg cttgcaaaca ggactctcga ggcccagggg aggctctgcc ccataaggcc
                                                                     720
caaggagcgt ttgtgcgttg aactgaaggc aaagtgctgg gcagtttctt gtcctaatga
                                                                     780
aggtggggaa gctggtccgg ccacatacat cctctgacct cccccaagtg gtccccgggc
                                                                     840
ccacaggtga caggggcctg agcgatccct ggtctgagcc cccagctcaq agcctagcac
                                                                     900
cacccaggga ggtctgggct catggaaggg ggatgggcgg gggcaggagg gcccagccc
                                                                     960
acctccgccc gtctttggtg gtgacagagg tgggaggaga aaagacgatc tttggtaggg
                                                                    1020
cgagggaatg tcaaaggaca ctgtcaaggg cccaqttcct qctcaqaaqa qaqcacagga
                                                                    1080
gtgggaggcc cacctctgcc ccatctctgg atggcccagg cctgctgccc actaaggtgg
                                                                    1140
ccccactctc cttctctgga gttgcaaact ctctgagaag gcggttgagg tgqgqaqqqc
                                                                    1200
atcaggacag gccagctgga tgctgagacc atatagccac aggtggcttc tagctcagga
                                                                    1260
cactgtgacc ttctcctcag ggctctaggc cccatccttc acctcctcc tcccag
                                                                    1316
```

```
<210> 5909
<211> 1913
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (419)...(132)
<223> similar to gi5816693 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5909
ggaggacccc ctggctggag ctgacccaca gagtagggaa tcatggctgg agaattggat
                                                                       60
agcagagtaa tgtttgacct ctggaaacac tcattctcaa tgcaagatcc tccgctgcaa
                                                                      120
tgctgagtac gtatcgtcca ctctgagcct tagaggtggg ggttcatcag gagcacttcg
                                                                      180
aggaggagga ggaggaggcc ggggtggagg ggtgggctct ggcggcctct gtcgagccct
                                                                      240
ccgctcctat gcgctctgca ctcggcgcac cgcccgcacc tgccgcgggg acctcgcctt
                                                                      300
ccattcggcg gtacatggca tcgaagacct gatgatccag cacaactgct cccqccaqqq
                                                                      360
ccctacagec cetececege eceggggece egecetteca ggegeggget eeggeetece
                                                                      420
tgccccggac ccttgtgact atgaaggccg gttttcccgg ctgcatggtc gtcccccggg
                                                                      480
gttcttgcat tgcgcttcct tcggggaccc ccatgtgcgc agcttccacc atcactttca
                                                                      540
cacatgccgt gtccaaggag cttggcctct actggataat gacttcctct ttgtccaagc
                                                                      600
caccagetee eccatggegt tgggggeeaa egetacegee acceggaage teaccateat
                                                                      660
atttaagaac atgcaggaat gcattgatca gaaggtgtat caggctgagg tggataatct
                                                                      720
teetgtagee tttgaagatg gttetateaa tggaggtgae egaeetgggg gateeagttt
                                                                      780
gtcgattcaa actgctaacc ctgggaacca tgtggagatc caagctgcct acattggcac
                                                                      840
aactataatc attoggoaga cagotgggoa gototootto tocatcaagg tagoagagga
                                                                      900
```

<210> 5910

```
tgtggccatg gccttctcag ctgaacagga cctgcagctc tgtgttgggg ggtgccctcc
                                                                      960
aagtcagcga ctctctcgat cagagcgcaa tcgtcgggga gctataacca ttgatactgc
                                                                     1020
cagacggctg tgcaaggaag ggcttccagt ggaagatgct tacttccatt cctgtgtctt
                                                                     1080
tgatgtttta atttctggtg atcccaactt taccgtggca gctcaggcag cactggagga
                                                                     1140
tgcccgagcc ttcctgccag acttagagaa gctgcatctc ttcccctcag atgctggggt
                                                                     1200
tcctctttcc tcagcaaccc tcttagctcc actcctttct gggctctttg ttctgtggct
                                                                    1260
ttgcattcag taaggggacc atcagtccca ttactagttt ggaaatgatt tggagataca
                                                                    1320
qattggcata gaagaatgta aagaatcatt aaaggaaggc aggggcctag ggagacacgt
                                                                    1380
tgaaacaatg gacatttttc cagagtcaga tgtaggctgc agtcccgggg ttgaaattat
                                                                    1440
cacagaataa qgattctggg caaggttact gcattccgga tctctgtggg gctcttccac
                                                                    1500
caatttttcc agcctccatt tattggtaaa ccaaattgtt cctaacccca tttactgcca
                                                                    1560
gatttcaccc cttataagtt tagaggtcca tgaagggttt taatggatcc agtaaggatt
                                                                    1620
ttaagggttg agatttttaa ggagccaaga gctgaaagca gaagacatga tcattagcca
                                                                    1680
taagaaactc aaaggaggaa gacataatta gggaaagaag tctatttgat gaatatgtgt
                                                                    1740
gtgtaaggta tgttctgctt tcttgattca aaaatgaagc aggcattgtc tagctcttaa
                                                                    1800
ggtgaaggga gtctctgctt tttgaagaat ggcacaggta ggacagaagt atcatcccta
                                                                    1860
ccccctaact aatctgttat taaagctaca aattcttccc cccaaaaaaa aaa
                                                                    1913
```

```
<211> 864
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (462)...(764)
     <223> similar to gi3288493 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5910
agtcagggga gacctgggtc ccccgcactg acttcctttc tcctcacagg gcaccagect
                                                                      60
ccaaatggct atggaccggg agcagaacca ggtgaggagg cccttcctgg agttcctccc
                                                                     120
ctcccttccc ttcctcttcc ttctgccatc ccaggaagag gggaggccag
                                                                     180
ggctgtggct ctcgctgacc cccatctgtg agtcacagtt ttctctcccc caggttttaa
                                                                     240
tggtggcctc gagccacaga aaattggtga gtcctcctgg gcccccgacc catgttgagc
                                                                     300
ggaagctggc atctccctca tgcctgagtc agtctgtctg tccgcatccc cctgtctatg
                                                                     360
agetggteae etggeeetee tgatgetgte eetgtteeae tageetgtee etageteete
                                                                     420
tccaatctct gtcctgcagg tttaggttat gggaatggtg tcctgggagc cagggtcttc
                                                                     480
cccgaggccc acccacagcc aggtgcctgg ggagcagggg tcggggtggg agagttgggc
                                                                     540
tcagggcccc agcccagcct ctgacaccct ctttcctcct ccagggttcc atggggccaa
                                                                     600
tggttttagg aatagtgagt cagacccagg ggacaaagtg cagtggagtg ggggagacaa
                                                                     660
caqcccaggg gctaggcggg aatgaccaga gtctcttgga ggggatgggg tggaagctct
                                                                     720
ggtgtacccc aaagcagcag ctccagcccc tgaaggaaat ggtaagaaat gagccttctg
                                                                     780
ggagcagagc caagcccaac aggggccagg ggtcccagct cctgtgggca agggtacccc
                                                                     840
tgccatcaga attccaccgc acgg
                                                                     864
```

```
<210> 5911
     <211> 978
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (737)...(262)
     <223> similar to gi206352 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5911
ttttttttt ttctaaatgt gtttactatt tattttttac tcttaaagtg atgttattta
                                                                       60
catgtgttgt tagaatgcaa accttatcag taggacatca aggattaagc tctggcagta
                                                                      120
ttaatagtta gaacagtcac atgtatgcaa atttttacat agttaaaaag aagaatcact
                                                                      180
gtaaaataaa tgcttattct ttaattataa gtgatgtgga acaatgtgta cttagttcta
                                                                      240
aagttcagtc aaggagactt ccaggatgtg catagctact gtatgagtgt ggggtgcaga
                                                                      300
gatggaggat gcttctggaa gtcaagcagt ggaattccat ggtatactca gaaaagttaa
                                                                      360
tagttcagtt atttccaaga agccttcttg ctgcagacca gtaattaatg gtcccgctgc
                                                                      420
tectetettt cattggtgee ttettettet teagggaatg etgatteatt etggeettte
                                                                      480
agatgettaa eccettttat ggtgggtggt gtgtacaeae tetgetteet ttgettaggg
                                                                      540
gatgcattct gtaattcccc ttgtgtgttg ggccccctct tgtcatctat ttctgggggg
                                                                      600
ttatgctcat tgagaatcac aagtgatgct ggtgtaggtc ttcttttcct gatctgctct
                                                                      660
gctgcttcag gtgcaatctg actctggaat acaggcacgg caaactgtat ctttttggga
                                                                      720
ctgttgggct ccatggtaat gatgataatt agtcagagat gtgaagagct cagaaagact
                                                                      780
aaccctaagt ggtgtccggg atgtgtttcc tcagacacac tccactaagc cacacagagt
                                                                      840
gcttcgtaat aaatagctgt aattccagat cgagcaagtg aagatgccga ggtttgagta
                                                                      900
accecettet teaacateca eggtgatgee tggettgeet gtteececae eaatecettg
                                                                      960
gatcctctca gcacaata
                                                                      978
     <210> 5912
     <211> 783
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (706)...(737)
     <223> similar to gill96912 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5912
cggcggtgcc cgggcgtccc ctgcagacac gcagccccgt ggaactcccg gcgggacggt
                                                                       60
tggggctgga ggaacaggac qcccqctctc qqcctccctt cccqqqcctq qqctqaqqqc
                                                                      120
agccqttggt qqqtttcagg gccgcctggg cagaatgtca cgatggacga gggcggcacg
                                                                      180
cccctgctcc ccgacagcct ggtctaccag atcttcctga gcctgggccc ggccgacgtg
                                                                      240
ctggccgccg ggctggtgtg ccgccaatgg caggccgtgt cgcgggacga gttcctgtqq
                                                                      300
```

```
agggagcagt totaccgcta ctaccaggtg gcccgcgacg tgccccgaca cccagcggcc
                                                                      360
atgtcctggt acgaggagtt ccagcggctg tatgacacgg tgccctgcgt ggaggtgcag
                                                                      420
acgctgcggg aacacacaga ccaggtcctg cacctcagct tctcccattc cqqqtaccaq
                                                                      480
ttcqcqtcct gctccaagga ctgcactgtg aagatctgga gcaacgacct gaccatctcg
                                                                      540
ctgctgcaca gcgcggacat gcggccctac aactggagct acacccagtt ctcccaqttc
                                                                      600
aacaaggacg actcgctact gctggcctcg ggggtgttcc tggggccgca caactcctca
                                                                      660
tccggcgaga ttgctgtcat cagcctagac tccttcgcgc tqctqtcccq cqtqcgqaac
                                                                      720
aagccctatg acgtgtttgg ctgccqqctc accqaqacca qtctcatctc qqqqaacctq
                                                                      780
cac
                                                                      783
```

```
<210> 5913
     <211> 1287
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1084)...(194)
     <223> similar to gi1907076 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5913
tttttttttt ttatttgcat gtgccaggaa atatcctaca tttattgtta caaaaaccat
                                                                       60
gttatcacgt tagtgtggaa ttctttagaa gccccggcta aataagcttt agaaatggaa
                                                                      120
tgccttcaat ggctcaatct cagaaatggc aaaattctag gacacatcaa gacctgctct
                                                                      180
tecgetttee actagttee aatetttgat ttecaggttt tggeeettte aaacceattt
                                                                      240
tttqcgtttc tqaaatcaag aataqcttga gaaatctctt cattggtgtt catcacaaat
                                                                      300
gggaccatgt tgggataact gggttctctt aatggctccc cagcaattaa qacaaaqtqq
                                                                      360
gcttctcttg ggatccttgt tctccacttg ggacactggt caccttctcc aagcaactgc
                                                                      420
tgtgtgatga ggttctattt ttttggtggg gcatcatcgg gccccatata cacatctcca
                                                                      480
gatatcgtgt aaatgaagct tgtccaccct ttaagggata ggttgggaaa tgtttggctc
                                                                      540
cctgggtcca atttgaagtc caaatataag gttggtgtgc caagtgtaaa ccttggacct
                                                                      600
tattcccaga gctttctcag aaatgacagc aactgtcaca ccatcctact tggggttaag
                                                                      660
ggatttettt actttteagt teetgggtae ttggggetee accatettet etgageteet
                                                                      720
caaattaaac ccacagttgt aagcccatgg gctgggctcc tctgagcaag gcatctcagc
                                                                      780
gtgcagaatg ccccggcccg cagtcatcca ctgcaaatct cctgggttca ttttaccagt
                                                                      840
gtgtccacag aagtcttcat gggccatgct gcccccttcc aggaggtagg atactgtttc
                                                                      900
aaaacctcga tgtggatgat caggaaatcc tcctggtcta cctcctttaa attcatcaaa
                                                                      960
cagtaaaaac ggatccagat tttttaactc gggtctgcca atgcttctcc ggaccctcgc
                                                                     1020
tecaaceeet teegaetget eeeggetgag caetgagaga gtaactttet tggaggaeee
                                                                     1080
```

<210> 5914

ggccggcggc ctagaggagg cgggagg

1140

1200

1260

1287

catatcggag tctaaaaaga gagtgttctg atgctgagct gtagaggatg gaggggctgc

ggtagcggca cctggagcct tagcggcggg ggtgacgcga agagccgccg ggagcgagtg

cagggagggc aggttaagag agtgtgggtc cagtcgcctc accgtgactc agcgcttcgc

```
<211> 2977
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (57)...(2602)
<223> similar to gi1907120 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5914 caagtgtgga gaaagcggct ctgggtctag attgagggat actccccctt tccaccatgg 60 gcaagaaggg caaagttggc aagagccgac gagacaagtt ttatcacttg gcgaaggaga 120 egggttaceg tteeegatet gettteaage tgateeaget caategeege ttteagttee 180 tgcagaaagc ccgagccttg ctggacctgt gtgctgcgcc agggggatgg ctgcaggtag 240 ctgccaagtt tatgcctgta tccagcctta ttgtgggagt ggacctggtt ccaatcaagc 300 ctctccccaa tgtggtgact ctccaggagg acatcacaac agaacgttgt aggcaggccc 360 tgaggaagga gctgaagacc tggaaggttg atgttgtgct caatgatggg gcccccaacg 420 ttggggctag ctgggtccat gatgcttact cacaagccca tttgacactg atggctctac 480 gtttggcttg tgactttttg gcccgtggtg gcagcttcat cacaaaggtt ttccgttctc 540 gtgactatca gcctctgcta tggatctttc agcagctgtt ccgccgtgtc caggccacca 600 agccccaagc ctctcgccat gaatctgcag agatctttgt agtctgccaa ggattcctgg 660 cccctgacaa ggttgacagt aaattctttg accccaaatt tgcctttaag gaggttgaag 720 ttcaggctaa gaccgttact gaattggtta ctaagaagaa gccaaaggct gaaggctatg 780 ctgagggtga cctcactctc tatcaccgta cctcagtcac tgacttcctc cgagctgcca 840 accetgttga ettectete aaggeeageg aaateatggt agatgatgaa gagttggeae 900 agcatccagc taccactgag gacatacggg tgtgctgtca ggacatcaga gtgttggggc 960 gcaaggagct caggtcgcta ctaaactgga gaacaaaact tcggcgatat gtggccaaga 1020 agctgaaaga acaagcaaag gcactggaca tcagcctcag ctctggagag gaagatgaag 1080 gtgatgagga ggactcaaca gctggaacca caaagcagcc ctctaaggag gaggaggaag 1140 aggaggagga ggaacaactg aaccagacct tggcagaaat gaaggcccag gaggtggcgg 1200 aattgaagag gaagaaaaag aagctgttgc gtgagcagag aaaqcagcgg gagcgtgtgg 1260 agctgaagat ggatctgcct ggggtttcca ttgcagacga gggggagact ggcatgttct 1320 ccttgtgcac catccggggt caccagttat tagaggaagt aacacaaggg gatatgagtg 1380 cagcagacac atttctgtcc gatctgccaa gggatgatat ctatgtgtca gatgttgagg 1440 acgacggtga tgacacatct ctggatagtg acctggatcc agaggagctg gcaggagtca 1500 ggggacatca gggtctaagg gaccaaaagc gtatgcgact tactgaagtg caaqatgata 1560 aagaggagga ggaggaggag aatccactgc tggtaccact ggaggaaaag gcagtactgc 1620 aggaagaaca agccaacctg tggttctcaa agggcagctt tgctgggatc qaggacqatg 1680 ccgatgaggc cctggagatc agtcaggccc agctgttatt tgagaaccgg cggaagggac 1740 ggcagcagca gcagaagcag cagctgccac agacaccccc ttcctgtttg aagactgaga 1800 taatgtctcc cctgtaccaa gatgaagccc ctaagggaac agaggcttct tcggggacag 1860 aagctgccac tggccttgaa ggggaagaaa aggatggcat ctcagacagt gatagcagta 1920 ctagcagtga ggaagaagag agctgggaac ccctccgtgg taagaagcga agccgtgggc 1980 ctaagtcaga tgatgacggg tttgagatag tgcctattga ggacccagcg aaacatcgga 2040 tactggaccc cgaaggcctt gctctaggtg ctgttattgc ctcttccaaa aaggccaaga 2100 gagacctcat agataactcc ttcaaccggt acacatttaa tgaggatgag ggggagcttc 2160 cggagtggtt tgtgcaagag gaaaagcagc accggatacg acagttgcct gttggtaaga 2220 aggaggtgga gcattaccgg aaacgctggc gggaaatcaa tgcacgtccc atcaagaagg 2280 tggctgaggc taaggctaga aagaaaagga ggatgctgaa gaggctggag cagaccagga 2340 agaaggcaga agccgtggtg aacacagtgg acatctcaga acgagagaaa gtggcacagc 2400 tgcgaagtct ctacaagaag gctgggcttg gcaaggagaa acgccatgtc acctacgttg 2460 tagccaaaaa aggtgtgggc cgcaaagtgc gccggccagc tggagtcaga ggtcatttca 2520 aggtggtgga ctcaaggatg aagaaggacc aaagagcaca gcaacgtaag gaacaaaaga 2580

```
aaaaacacaa acggaagtaa gcagagctgc caggctccca ggagagcatg gggactagga
                                                                     2640
ggaagggtgt ggcatggctc agtctggccc ccttgattac cggcctagcc cctqctcaca
                                                                     2700
tcacagctgt ctgaagaaca gtgaggtgga gtgcctagaa ctcccgtggt ggtcctgagc
                                                                     2760
agagaggagg atgtcctcct gcctgcctga aggtctccca tgaaaacact gctgaactgt
                                                                     2820
gttgacactc atgacccttt ttttaaaccg ttaaagggaa gttcggtgtt ggagcgatac
                                                                     2880
tcaatgtagt cagtctacac ctggacgtgt gggccactta agccctcccc acccccatcc
                                                                     2940
tattcctaaa taaaaccagg ataatggaaa aaaaaaa
                                                                     2977
     <210> 5915
     <211> 1012
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (235)...(818)
     <223> similar to gi297547 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5915
cgacccacgc gtccgctcta cttatccttc caatgatcac tgccaagttc tctttagcca
                                                                       60
tgcaaatggt ttctcttgac gattgaccca tgaacacttg aaaggaaggt gtattctgcc
                                                                      120
actttaaaat gaagtgcttt ataaacaaca aagagctcaa gttagctaaa actggataca
                                                                      180
ggcgcagatt tattatatga atatattacg tagtggcaaa gtccaggctt ttaagacatg
                                                                      240
attgggaagg tgtttatttt tcctaaagaa tctaatagtg ctcacgtgag cttgatcaca
                                                                      300
cagctggaga aatctacaga acttcactgc gtgtcttcat gcttataccg acctctccca
                                                                      360
tggctatcgc ctcttctcct acagcatcca gaccaagagc aatgagatgg tcatttttaa
                                                                      420
gtctcaaatt ggggagtaca atcttatcat tgggggtgac aaggttttct tcaaggtctg
                                                                      480
tgagaatttc cccaccctgg tgcacatcta tgccagctgg gagtcctcct caggcattgc
                                                                      540
tgagttctgg gtcagtgaga agccttaggt gaggatgggg ctaaggcagg gtttctctgt
                                                                      600
gggagcttac cccaagattg ccctgggtag cagcagggtt cctatggagg caagtttggt
                                                                      660
aagagccagt ccattgtggg agagattgga gatgtgtaca tgtgggactc tgtgctgtcc
                                                                      720
ccagaagaaa tctggtttgt gtatcaaggt atctacatca aacccaatat tctggactgg
                                                                      780
cgggcattga actatacaat gcaaggttat gtggtcaccc agtcccataa atagagttga
                                                                      840
agttotgott caacaggaca aagttactgg gaaggaaato cocaacatga aagaccagot
                                                                      900
ctgaagacaa ttctacttca tgccttatgt ctatttctct gttttctctg aatttcctat
                                                                      960
ctattgaact gcttaattta caataaaagt acaatgcctt ctaaaaaaaa aa
                                                                     1012
    <210> 5916
    <211> 1832
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
```

<222> (294)...(1441)

<223> similar to gi2828790 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

```
<400> 5916
caagatgctc agctagcaga gctgacttcc tgccacaaag tagtgtggcc tcacagtcgt
                                                                       60
cttctgaagg caagctggct acaaaaggtg acagctcgga gagggagaga agggagcaaa
                                                                      120
atttacctgc acgtcccagc agggctcctg tgagtatttg tggtggtggg gaaaacacct
                                                                      180
caaagagtgc agaggaacct gtggtcaggc ccaaaatcag aaacctggca agtccaaact
                                                                      240
gcgtgaaacc aaaaattttt tttgatactg atgatgatga cgatatgcca cacagtactt
                                                                      300
ccaggtggag ggataccgcc aatgacaatg agggccactc ggatggcctg gcaagaagag
                                                                      360
ggagaggcga gagttcaagt ggctatcccg agccaaagta ccctgaagac aaacgggaag
                                                                      420
cqaqqaqtqa ccaaqtgaaa ccagaaaagg tgccgagacg acgacgcacc atggccgacc
                                                                      480
ctgacttctg gacgcacagt gatgattact acaaatactg cgacgaagac tctgacagtg
                                                                      540
acaaagagtg gattgctgct ctgcgtcgga aatatcgaag ccgagagcaa accctgtcct
                                                                      600
ccagtggcga aagctgggag actctgccgg ggaaagaaga gcgggaacct ccacaggcta
                                                                      660
aggtgagtgc cagcactggc accagccctg gccccggtgc tagtgccagt gccggggctg
                                                                      720
gcgccggggc cagtgctggc agcaatggca gcaattacct tgaagaagtt cgagaaccat
                                                                      780
ctcttcagga agagcaggca tccctggaag aaggagaaat tccttggctc cagtaccatg
                                                                      840
agaatgacag tagcagtgag ggggataatg attctggtca cgagttgatg caacctgggg
                                                                      900
tattcatgct ggatggaaac aacaaccttg aagatgactc cagtgtgagc gaagacctag
                                                                      960
aagtggattg gagcctcttt gatggatttg cagatgggtt aggagtggct gaagccattt
                                                                     1020
cctatgtgga ccctcagttc ctcacctaca tggcacttga agaacgcctg qcccagqcaa
                                                                     1080
tggaaactgc ccttgcgcac ttggagtctc tcgcagtgga tgtagaggtg gccaatccac
                                                                     1140
cagcaagcaa ggagagcatt gacgctcttc ccgagatcct ggtcactgaa gatcatggcg
                                                                     1200
cagttggtca ggagatgtgc tgccccatct gctgtagcga atatgtgaag ggggaggtgg
                                                                     1260
caactgagct gccgtgccac cactatttcc acaagccgtg tgtgtccatc tggcttcaga
                                                                     1320
agtcaggcac ctgccccgtg tgccgctgca tgttccctcc cccactctaa agaccaaggc
                                                                     1380
cqtttactcc tggtctgatt attttcccca tctgaaatcc acaatactgc aggagccctc
                                                                     1440
ttgaaattaa caatggaaat aaaaccaatc agtcagttag cctaaaccta ttgattcctc
                                                                     1500
gtgattattt ccaatgtgaa aacagttgtg tatgattgca ttaaaaaatca tatcatcttt
                                                                     1560
tagaggttag aaaagggaaa actaaacttt ctaaatgcta cttgagattg cagtaagaag
                                                                     1620
atacgttttc taacctgaaa gttaaatcgc atttgttttc ttcagtagaa tgggaatgtg
                                                                     1680
ttgctgttac ttgtaatgtc aagtttatct gttaaatatg tccaaaaggc aaaatcattt
                                                                     1740
ttgttgcatg ttatgggtcg atgttcctgt aattgcagtg ccgtaaaagc ttattaaagt
                                                                     1800
tgttcttttg gttttacatg gtaaaaaaa aa
                                                                     1832
```

```
<210> 5917
<211> 1286
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (802)...(1132)
<223> similar to gi5104682 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5917
ttttttttt ttaaccaaat atgaaaatgt gttttatttc tcagtacaaa gccagatact
                                                                       60
gtaaggctat gaaaaactga ctagccagag gccagaaagg acaaaaagaa gactatctct
                                                                      120
qqcctggtgc cctgtgatct ggcgtggtgt cacaggaggt ctggggacag cagcaaagac
                                                                      180
ctggaccggt ggaggtggat gagggaagcg atctqccaqc ccttccaqcc tcccqcqqct
                                                                      240
ggggcctgag gatcctgcct gcctttgggg gccactgqtt qcctqqcctq qctqqttcca
                                                                      300
ggaatgaact gggagaggac aggaggtgca gggaggggc gggggtggga ggcgtgaccc
                                                                      360
tttttgcacg ggaagctctg ttttcattcc gtgccacagg tgagtgtgca gggctagagt
                                                                      420
tgagaatgaa actagggtgc tgttgccccc aaaggtacct tcagtccctc taccacatcc
                                                                      480
cagttagaaa gtcttgagcc cttggacagg cagacatggg cctgggactt aaggctgtag
                                                                      540
gaggtgaggc tgtagtgaca ggggtgggag gtgaggccgt agtgacaggg gtgggaggtg
                                                                      600
aggctgtagt gacgggtatg gggcggagct gagaggaatg tgtgcggcaa cagacgtgag
                                                                      660
ggtgtttctc caaggagttg tggatcctct tcagtgtcag gggagcgtgg gcatgtgtga
                                                                      720
gggctcaggc ctcgccctcc tctccactgt catgcacgct ggcctgtctc accaccttcc
                                                                      780
ggaacctggg cgtagaggaa atgcagggct ctccctgccc ctgcccctgc ccctqctcct
                                                                      840
gctcctggaa ggcctgggtc cggttggcca ccacggcact gccctggagg gtaaccactg
                                                                      900
actggcggga cttcagggca ggctgaggcc ccctqtccac ctgctggcct cccttqqtcc
                                                                      960
ttgcaagctg tgggaagggc tgcagaggct cttcatgtga agactcgtgg gaagaaga
                                                                     1020
cctctggcat gtcactggtc tctgaggtgc tctccagctc caaggagggc tccagaagac
                                                                     1080
tgatggacct catgacccct cggaggttta tacgtggccg tggcccaggc tcttctttcg
                                                                     1140
gggctgcctg gctctcttcc atgcctacaa ccttctcctc cccaccaccc tcaggttctg
                                                                     1200
gcggaagagg tgggaatggt gtagagactt caggggctgg gtgctcctct ggggagaccc
                                                                     1260
cacccacgaa ttccaccaca ctggac
                                                                     1286
     <210> 5918
     <211> 2073
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (321)...(1127)
     <223> similar to gi2690100 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5918
aaatgatgga agaaattgaa aatgcaatta acacttttaa agaagagcag aggttgatat
                                                                       60
atgaagagct aattaaagaa gagaagacaa ctaataatga gttgagtgcc atatcaagaa
                                                                      120
aaattgacac atgggctttg ggtaattcag aaacagagaa agctttcaga gcaatctcaa
                                                                      180
gcaaagttcc tgtagacaaa gtaacaccaa gtactcttcc agaagaggta ctagattttg
                                                                      240
aaaaattcct tcagcaaaca ggagggcgac aaggtgcctg qgatgattat gatcaccaga
                                                                      300
actttgtaaa ggtgagaaac aaacataaag ggaagccaac atttatggaa gaagttctag
                                                                      360
aacaccttcc tggaaaaaca caagatgaag ttcaacagca tgaaaaatgg tatcaaaagt
                                                                      420
ttctggctct agaagaaaga aaaaaagagt caattcagat ttggaaaact aaaaagcagc
                                                                      480
aaaaaaggga ggaaattttc aagttaaagg aaaaggcaga caacacacct gtgctttttc
                                                                      540
ataataaaca agaggataat caaaagcaaa aagaggaaca aagaaagaaa cagaaattgg
                                                                      600
cagttgaagc ttggaagaaa cagaaaagta tagaaatgtc aatgaaatgt gcttcccagt
                                                                      660
taaaagaaga agaagagaaa gagaaaaaac atcagaaaga acgccagcgc cagtttaagt
                                                                      720
taaaattact actagaaagt tatacccagc agaagaaaga acaggaagaa tttttgaggc
                                                                      780
```

840

ttgaaaagga gataagggaa aaggcagaaa aggcagaaaa aaggaaaaat gctgctgatg

```
aaatttccag atttcaagaa agagatttac ataaacttga actgaaaatt ctagatagac
                                                                      900
aggcaaagga agatgaaaag tcacaaaaac aaagaagact ggcaaaatta aaagaaaagg
                                                                      960
ttgaaaacaa tgttagtaga gatccctcta ggctttacaa acccaccaaa ggttgggaag
                                                                     1020
aacgaaccaa aaagatagga ccaacaggct ctgggccact tctacatatc ccacataggg
                                                                     1080
ctattccaac ctggagacaa ggaatacaga gaaqagtatq agataatcaa attgctactc
                                                                     1140
agttgataag aatgttaaca tactaagtta taccagggag agagtgacta accacattct
                                                                     1200
ttaaatatca atagcttagt cagattgatt attgtgctat attgtgaatt gagaggtatt
                                                                     1260
aagtttcatg aggctttgtc attagtattc ctgcttctac caaqaaqqta tttaatatat
                                                                     1320
gtgttggcct attattgatg taaaagttat ttaaataagt taatgttaga aacattattc
                                                                     1380
aatttaaata ctgaaaacat ttcaaagaga ttttgttttt gttatagcat agcaaagtaa
                                                                     1440
attggaacaa tcattccaat gacatttttt taaaccaaaa tttttgtaac ttttataact
                                                                    1500
tggagttaag ttagcttgag taacaaaaag gtaaagtggt ttttgtttag agttaacgaa
                                                                     1560
atgttagtac tttttctaat gtttaaccaa attggcagtt tgtcagttat gacatttttg
                                                                     1620
tqtaataaat attttgtatt tgtttgaagc atgctttgtt ttatatagag aatatttatt
                                                                     1680
ttaaaaaatat gtctctcata taccctatta attgtattat tgatataatc tttttggttt
                                                                     1740
ccttcagcaa ttccaaattt tccttcagcc tttctggatt tcacagattt ataaaatctt
                                                                     1800
tgtgtctttc acatcttcct ggctaatgca gttttctttt ctgcttctgt ttgcctcaaa
                                                                     1860
ataggaaaat tettigitet gaaacateat etgaaataag eeagetitaa aataetgiga
                                                                     1920
tttctcttga tggcacttaa aatgttttag gtggggcatg gtggctcatg cttgtaatcc
                                                                     1980
cagcactttc agaggtcaag gtaggagaat tgaggcctgg agtttgacac tagcctgggc
                                                                     2040
aacacaggga gaccctgtct ctacagaaaa aaa
                                                                     2073
```

```
<210> 5919
<211> 873
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (559)...(665)
<223> similar to gi1335199 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5919
acctagetgt gteeceacaa ggeggaaagg ggeaaacaag tteecteagg ceactettae
                                                                      60
ggggcattaa tccctgactt aatcacctcc taaaaagggt gtcctcttga cactatcaca
                                                                     120
ttatggatta gggttcaacc tatgaattac gtaggcacag acacattcag atcctggcac
                                                                     180
tacatgtagg atattcagtt agcccctggt tgagggggt ttgtgttgct actggtttc
                                                                     240
tgctattaca cataaccctt taatgaattg ccttacgcat gcatgttttt gagtgttcgt
                                                                     300
cagtctctct ttggaataga ctcccagaag tggaattgct gagtcaaagg gtaaatgcat
                                                                     360
acggaatttt gattgatacg gccacttccc atccatgggg gttttactgt tttatattcc
                                                                     420
cgccagcagt gaatgagtac cctttttcc ccaacagagt attttgtcaa atttttcaat
                                                                     480
ttttgcaggc ttatagatga gaagtgatat tatctcactg tacttctaat tgcatttctc
                                                                     540
tetttteatg tggttaagag ceatttgtat tttetgtgaa etatttaace tatttteta
                                                                     600
tagaattttt ggtctttttc aaccattttc agctctttgt atactaggaa tattaaccct
                                                                     660
ttgtaatgtt tgttgtacat atttttccca atttgtcatt tatcttttca cttggtttct
                                                                     720
gcaaagattt actttatttc tgtgttaaat gtgttgattt tttcttattg cttctggatt
                                                                     780
ttagagtcat aggaaggttt tetteattee eagettttae aggaatttat egtgttttt
                                                                     840
tcaggcagac ttttatagtt tctggtttta cat
                                                                     873
```

```
<210> 5920
<211> 1470
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (668)...(1281)
<223> similar to gi53797 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5920
ttttttttt ttctgggggc tgcttttatg gggacgacct gacagagggc atggtccgta
                                                                       60
caaaaccggg aacaatacat acatatatat attatataca gagatgcggc cctcccgacg
                                                                      120
getgggeagg ggtggeeget ggeeeaagea geeegaageg geeeegeeea eeeggtteeg
                                                                      180
ccccctccat ctgccggggt gaagtgcgcg agcccaggac tgagacagcc agctccttca
                                                                      240
ggggatgggg gcacatctgg ggataggaag gggtggggac aagaaatact gatcgaagtc
                                                                      300
atggtctatt tacaggggac aagaagccaa aacggatggg atgggtggtc tgtttttaaa
                                                                      360
aaatgaacaa aaacccagtt agggcagggg catgaagtgg caaaatgaga tggattttga
                                                                      420
aaggggaggg gacctggggg aggtggtctc acctcccttg gtccaagccc caatttgggg
                                                                      480
ttaaagtggg gaaacagagt cgatttcact tagaaggcag gctgccagca gggcagccct
                                                                      540
ggtctccaaa aagatgagta gtagtaaaat tttgccctcc agtcaaaaca ttggaaaacc
                                                                      600
agtagggggt gggggcgagg ctgactccct gcaatgtcag taggcttcca ggcatcgccc
                                                                      660
tgggctgggc agacagggca gcacaggata ggacctgact ctccagggag aaatgttccc
                                                                      720
cttgcctaag accagggtcg ctgtagccag accccctttc ctccctggca ttcccaggct
                                                                      780
tgaccaggaa acctggaccc cagagaggcc acataacagt tccaagacga ggttatggct
                                                                      840
atttggcacc tggaagaggg gaggcacaag gagaaattga gggctgctgc cccaggcaat
                                                                      900
ggggagctgg ggaccaggtg tcctgaactc tccctttttc ccactctcac tcccctttt
                                                                      960
cccgaaggac acatgagaaa tcagtgcagg gccagggcca ggcccagcct ccgggctctg
                                                                     1020
gggtggactc tatccctccc aggacaggga acagggatgg gggaggtgtt gaggcaacgc
                                                                     1080
ccccacccc caggcgggag ggtcagaatg caacagagac ggcacaatga tgqqqqqaqa
                                                                     1140
gggaagggcc gagaaggtag aatctcaagt caagaggccc aggggccacc caggtgcccc
                                                                     1200
atgggcaggg agcagcccc agttggcaga tgctgggaga gccccagccc cgttccagtc
                                                                     1260
cagagacaaa agctggagtg tgtaaagtct ggcagtttga tctgcaggtg cttgtgtccg
                                                                     1320
tegaceacea ggeeageeet eggeageeet eggeetetgt geeteageee eatggggeaa
                                                                     1380
gaaagagget geeettetag ceacetetgt etgeecagge catettaagg gggeetgtat
                                                                     1440
atagccggcg ctggtcgacc gggaatccgg
                                                                     1470
```

```
<210> 5921
<211> 3595
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (287)...(2913)
```

<223> similar to gi4754060 in the genepept database release 114, Run with FASTXY 3.3t00, default parameters

<400> 5921 gggcagtgtc tcgtttgcag tcggcgcttt aggggaactg tcttcctccg caggcgcgag 60 gctgggtaca gggtctattg tctgtggttg actccgtact ttggtctgag gccttcggga 120 gettteeega ggeagttage agaageegea geggeegeee eegeeegtet eetetgteee 180 tgggcccggg agggaccaac ttggcgtcac gcccctcagc ggtcgccact ctcttctctg 240 ttgttgggtc cgcatcgtat tcccggaatc agacggtgcc ccatagatqq ccaqctttcc 300 cccgagggtc aacgagaaag agatcgtgag attacgtact ataggtgaac ttttagctcc 360 tgcagctcct tttgacaaga aatgtggtcg tgaaaattgg actgttgctt ttgctccaga 420 tggttcatac tttgcttggt cacaaggaca tcgcacagta aagcttgttc cgtggtccca 480 gtgccttcag aactttctct tgcatggcac caagaatgtt accaattcaa gcagtttaag 540 attgccaaga caaaatagtg atggtggtca gaaaaataag cctcgtgaac atattataga 600 ctgtggagat atagtctgga gtcttgcttt tgggtcatca gttccagaaa aacagagtcg 660 ctgtgtaaat atagaatggc atcgcttcag atttggacaa gatcagctac ttcttgctac 720 agggttgaac agtgggcgta tcaaaatatg ggatgtatat acaggaaaac tcctccttaa 780 cttggtagat catactggag tggtcagaga tttaactttt gctccagatg gaagcttgat 840 cctqqtqtca qcttcaaqag acaaaactct cagagtatgg gacctgagag atgatggaaa 900 ccatgatgaa agtattgagg ggtcatcaga attgggtgta ccagctgtgc attctctcct 960 gactetteta tgetgtgtte agteggagee agtaaageag tggtggeage aatattggtg 1020 tgattgaggt tatgctggca ccactcgcac acaggcgcca caatggtgtt aagctgggca 1080 gaaagagtgg catctctggc taccgggctg ggggcgacct ttaccatagg atgaagtaac 1140 cttgcattcg tgctgcaagg tgtactgtac gtacacaggt gctggtcgat gtccactttc 1200 tgcttttctt tctttttt tttcttttt aaagtaattt cccccacagt aaaataccac 1260 tgactcctga gtaaattgat tttccagttt tatggaattg ggagtctgac aagtgaaacc 1320 aatttaatgt aaagtatttg gctttcaaat ggtttctctg tgctattttt tggaattctt 1380 tcagattcca gagatatctt acgtctttga ttcaatttaa aatttgtact tattttcttt 1440 tagaaataat gtattgtgtc tgtgcagaaa aaaaaaaaac caaaaaggat tgctttactc 1500 caagaggaga gattgtctta ggataaacct ccaagctcac atttaatata acagactgaa 1560 gtaaacatta gaateetgtt tagagetatt etgeaeagtt aactaetgat etttagaate 1620 taaaattgta tatgaactta ttcttaaata attgacccgt tttatattca aatgacttat 1680 gatcgtggtt agtttgggaa aaataagatg gttaaatttt gatttattga aatgtaattg 1740 tattattttc ataaaatagc attttcattt tgtaatgtgg tttaacatcc ttgttgtttg 1800 ccaaagaaat ttcatttggc tgtgaatatt ctatttgctt gcagtatctg tttctcttcc 1860 taggctcaag ttggtgaccc aagcctattg taaacaagtg attatctcaa agggagatgc 1920 caatggagta acaatttgtt aaccttacgt tttctgtctg tatatttttt taaaaatctg 1980 gtagtttctg gaaaaaaaag agaagggggt ttgtagtact taaccctatt tatttccgta 2040 tattttagtt aattagtttt tggaataaat ggatttcagt atagctttgt ggttaaattg 2100 cattgccttt attttatgtt taggcttatt tttaaattaa catttaacag aaacatttga 2160 aatagaattt gcatgtctgc cttaattaac ttaaagactg attttaatct gactatgaca 2220 ctgagcatat tctttaaatt actcataatt tataatgctt aatataatct taattaaatt 2280 tagcagtttt agtataagat gtgccatttt gtcctctgta tgtctgaatg aagctataac 2340 atttgccttt ttattgcagg ttttcctttg gaatatggat aaatacacca tgatacggaa 2400 actagaagga catcaccatg atgtggtagc ttgtgacttt tctcctgatg gagcattact 2460 ggctactgca tcttatgata ctcgagtata tatctgggat ccacataatg gagacattct 2520 gatggaattt gggcacctgt ttcccccacc tactccaata tttgctggag gagcaaatga 2580 ccggtgggta cgatctgtat cttttagcca tgatggactg catgttgcaa gccttgctga 2640 tgataaaatg gtgaggttct ggagaattga tgaggattat ccagtgcaag ttgcaccttt 2700 gagcaatggt ctttgctgtg ccttctctac tgatggcagt gttttagctg ctgggacaca 2760 tgacggaagt gtgtattttt gggccactcc acggcaggtc cctagcctgc aacatttatg 2820 togcatgica atcogaagag tgatgoccao coaagaagti caggagotgo ogattootto 2880 caagettttg gagtttetet egtategtat ttagaagatt etgeetteee tagtagtagg 2940 gactgacaga atacacttaa cacaaacctc aagctttact gacttcaatt atctgttttt 3000

```
aaaqacgtag aagatttatt taatttgata tgttcttgta ctgcattttg atcagttgag
                                                                      3060
 cttttaaaat attatttata gacaatagaa gtatttctga acatatcaaa tataaatttt
                                                                      3120
tttaaagatc taactgtgaa aacatacata cctgtacata tttagatata agctgctata
                                                                      3180
 tgttgaatgg accettttge ttttctgatt tttagttctg acatgtatat attgcttcag
                                                                      3240
 tagaqccaca atatgtatct ttgctgtaaa gtgcaaggaa attttaaatt ctgggacact
                                                                      3300
 gagttagatg gtaaatactg acttacgaaa gttgaattgg gtgaggcggg caaatcacct
                                                                      3360
 gaggtcagca gtttgagact aqcctqqcaa acatqatqaa accctqtctc tactaaaaat
                                                                      3420
 acaaaaaaaa aaaaaattac ccaggcgggg gggggcacac ctgtagtcct agctacttgg
                                                                      3480
 qaqqctqaqq caggaaaatt gcttgaaccc aggagggga ggttgcagta agccaagatc
                                                                      3540
 acaccactgc actccaacct ggacaacaga gcgagactcc atctcaaaaa aaaaa
                                                                      3595
```

```
<210> 5922
<211> 1011
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (420)...(65)
<223> similar to gi168459 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5922
cgggctggaa cagagcagcc ggcctctgtc ctaagactgg ccacgctgag acggacaggc
                                                                       60
agcaggggag cgaccggagc tggggcgctg gatgtgggga aagggagaga ggtgttaggg
                                                                      120
aggcccccag tctcgggccc aggttacaag gtcttaccct ggggtgggaa cccaggaggt
                                                                      180
ggagtggctg gggggcacag ctgagaagtt caggaagatg gaggatgagg attcccaqqt
                                                                      240
tcctccctgt ccatgtcagg gtgaggggtg caggagcaca gaggccatgc tctgccatgg
                                                                      300
ctggggactt ccttgtgaat actgcagccc tagggctgca aggggacacc acgcacagag
                                                                      360
acacggcagg ccccgtgttg gccgggggtg qqqqtqaqqq caqaaccaqc cqaggqacgc
                                                                      420
tgagtcagac cgcttgccca ctgctctggt gcagggacct ggctgcaggt gctggagacc
                                                                      480
atcggtgtgc tggcggtcat tgccaatggg atggtcattg ccttcacatc tgagttcatc
                                                                      540
ccccgagtgg tctacaagta ccgctatagc ccatgcctga aagaaggcaa ctctactgtc
                                                                      600
gactgcctca agggctacgt caaccacagc ctgtccgtct tccacaccaa ggacttccag
                                                                      660
gaccctgatg ggattgaggg ctcagaaaac gtgactctgt gcaggtttgg aactccccat
                                                                      720
cccccaagaa tgccctctga actcctgacc cctgacctca ggtacttcct taccccagat
                                                                      780
acagggacta ccgcaatccc cccgattaca acttctccga gcagttctgg ttcctcctgg
                                                                      840
ccatcogcct ggccttcgtc atcctctttg agcacgtggc cttgtgcatc aaqctcatcg
                                                                      900
ccgcctggtt cgtgcccgac atccctcagt cggtgaagaa caaggttctg gaggtgaagt
                                                                      960
accagagget gegtgagaag atgtggeatg gaaggeacag geatgegttg g
                                                                     1011
```

```
<210> 5923
<211> 911
<212> DNA
<213> Homo sapiens
```

```
<220>
     <221> misc feature
     <222> (1)...(912)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (336)...(684)
     <223> similar to gi5105617 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5923
tttccggagc ccgcccctc cggggagnag gaggagggc ggcgggggaa gggagggcgg
                                                                       60
gtggagggt cgggaggaac ggggggcggg aaagatccgc cgggccgccg acacggcggc
                                                                      120
accogcogco gggttgaatc ctccgggcgg actgcgcgga ccccacccgt ttacctctta
                                                                      180
acggtttcac gccctcttga actctctctt caaagttctt ttcaactttc ccttacggta
                                                                      240
cttgttgact atcggtctcg tgccggtatt tagccttaga tggagtttac cacccgcttt
                                                                      300
gggctgcatt cccaagcaac ccgactccgg gaagacccgg gcccggcgcg ccgggggccg
                                                                      360
ctaccggcct cacaccgtcc acgggctggg cctcgatcag aaggacttgg gcccccacg
                                                                      420
agcggcgccg gggagcgggt cttccgtacg ccacatgtcc cgcgccccgc cgcggggcgg
                                                                      480
ggattcggcg ctgggctctt ccctgttcac tcgccgttac tgagggaatc ctggttagtt
                                                                      540
tetttteete egetgaetaa tatgettaaa tteagegggt egecaegtet getegtgeeg
                                                                      600
aattcggcac gaactgtgat gcccttagat gtccggggct gcacgcgcgc tacactgact
                                                                      660
ggctcagcgt gtgcctaccc tacgccggca ggcgcgggta acccgttgaa ccccattcgt
                                                                      720
gatggggatc ggggattgca attattcccc atgaacgagg aattcccagt aagtgcgggt
                                                                      780
cataagcttg cgttgattaa ggtgcatgac accacacccg gctaattttt gtattttag
                                                                      840
tagagacagg gtttcaccat gttggccagg atggtctaga tctcttgacc tcgtgatccg
                                                                      900
ccttcctcgg c
                                                                      911
     <210> 5924
     <211> 1041
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (53)...(40)
     <223> similar to gil710367 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5924
tggggcaagg atttcatgag catcctcctc taaacgcgtg tcaagacaaa agatgcttca
                                                                       60
gctttggaaa cttgttctcc tgtgcggcgt gctcactggg acctcagagt ctcttcttga
                                                                      120
caatcttggc aatgacctaa gcaatgtcgt ggataagctg gaacctgttc ttcacgaggg
                                                                      180
acttgagaca gttgacaata ctcttaaagg catccttgag aaactgaagg tcgacctagg
                                                                      240
agtgcttcag aaatccagtg cttggcaact ggccaagcag aaggcccagg aagctgagaa
                                                                      300
attgctgaac aatgtcattt ctaagctgct tccaactaac acggacattt ttgggttgaa
                                                                      360
```

<210> 5925

```
aatcaqcaac tccctcatcc tggatgtcaa agctgaaccg atcgatgatg gcaaaggcct
                                                                      420
taacctgage tteectgtea cegegaatgt cactgaggee gggeecatea ttgaccagat
                                                                      480
tatcaacact gagageetee ttggacetee tgacegeagt cacaattgaa actgateece
                                                                      540
agacacacca tcctgttgcc ggactgggag aatgcgccag agacccaacc agcatctcac
                                                                      600
tttgcttgct ggacaaacac agccaaatca tcaacaagtt cgtgaatagc gtgatcaaca
                                                                      660
cgctgaaaag cactgtatcc tccctgctgc agaaggagat atgtccactg atccgcatct
                                                                      720
tcatccactc cctggatgtg aatgtcattc agcaggtcgt cgataatcct cagcacaaaa
                                                                      780
cccagctgca aaccctcatc tgaagaggac gaatgaggag gaccactgtg gtgcatgctg
                                                                      840
attggttccc agtggcttgc cccacccct tatagcatct ccctccagga agctgctgcc
                                                                      900
accacctaac cagcgtgaaa gcctgagtcc caccagaagg accttcccag ataccccttc
                                                                      960
tcctcacagt cagaacagca gcctctacac atgttgtcct gcccctggca ataaaggccc
                                                                     1020
atttctgcac caaaaaaaaa a
                                                                     1041
```

```
<211> 2257
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1983)...(483)
<223> similar to gi5532485 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5925 ttttttttt ttaaatattt gaattttatt ttcgttttgt tttacaactg tggaacactc 60 agataatcta taccatgtta gtattcctac aagagaaaac gggtaaaaca gtatttagaa 120 agcagtaccc agtaaaacgt tattacaagc cattagatgt gtttaaaaag ttgataccta 180 atttataacc ctgtaattgg taaatggtgc atgacttaaa tgttaaaatc ctgtatttta 240 aggatagtct tctgcagtta caaatcccat atacccagat ttcctgtagg cttcacaaat 300 cggaggggta catagaatgt gcaagagtca aaggataaat aatattataa atatatatta 360 actatattac ctaattaaaa ccataatctg ttaatacagc tatggattaa tttcaaaaaa 420 atgtaatcaa atatattact aatggtgtag ttggctgttt tccaatgttg gtaaagttat 480 taaagttett caettteata gagteeagat tgagetgeea aacgetgaaa tteteettet 540 gggttaaaag cttgttttac attcaaacct ttcccattaa gtgctaaata tttgctgaat 600 gttggtcgaa cccgtaactg cttaggagct ggaagagttt ggtttggacg tgccgtaacg 660 tctaatcttg tgttacatgt agtcactcca gcttcattaa ctgctgacac agtataccac 720 780 tataagetta tteggteagt gttgaattgt accattteat tatttetttt ceagaaaage 840 tttggtggag gtatagccga gatctggcat tctagtttca ctgaatctcc ctctaaaact 900 tttttgctct gtggtttgta gataaacatt ggtgctcttt tatgttcttt tgcaaggaca 960 tecagetgea cagtgaaggt ggetteteet getetattet tggeaacaca tgeataagee 1020 cctgcatctg aagctctgac tacttcaaag atgagtgaat gaagaccctt ctcagacact 1080 atcattttgt gcaaatcatc tgattgaact gttcttccat ttagatacca tgacacatca 1140 ggagctggca gtccactcac tttgaagtcc attctgcaga atcttccttc atcaatcgac 1200 atgttctctg gcacttgaat gaaacgtggt gggtaaaatt tctcctggat tgcatcctga 1260 tcattcacat ctccccttga ggttgatcta cttcttactt gtgatgtagg aacttgcagt 1320 cgcgcatgtt ctgagttgtg ttgctgcgag tcttgtgcac cactgtcatc ctgagcttga 1380 aacacagcag ctgcattctg tggtcctagc aatctgcgag ccatcttctc ttcatatgtt 1440 agacgttgat ttccattatg aagaagggtg tccttgcatt tcagctttct ttccaaatct 1500

```
tgaatcaaag cttcttttga tccttgtatt tcatgatcag gagttcttgg tatgggctta
                                                                     1560
accatttgca gtttgggatg gctttgccat ttatagggtt ggcccagctg aggactgttg
                                                                     1620
atagttggaa tccatagcgg aagggatttt actgctattg taatcaggct gtgatggtaa
                                                                     1680
tatggagctg aggaagctgg ctggggactg gttataggtg gttgtaaccc tttggcctgg
                                                                     1740
gttggagcca gcatgctgct ggggagaagc agggaaagca qaqqaqqaca tqqtqatqtq
                                                                     1800
agagctcagt gttgaggagg cagaaaatct ttgctctgta cactggcggg gctggatgat
                                                                     1860
aatggaagac tgtttggtct ggctagagaa gctggaggtt tctggtccag gaggctgcaa
                                                                     1920
tctqqaqcca catqqgtttt qqqactqqat qaaqtqtttt qqacqttcqt aqttaaacat
                                                                     1980
gcttagttgg tatatggaag atgaaggcaa attattacta taatgatttg ttcctggaag
                                                                     2040
ggtggggccc tgaatttggg gccacaagcc tggaattacg gaaggttgta aggaatcaga
                                                                     2100
agcaaccttg gtctgctctt ccttgttgag atcctgagaa tactgtgctc ctggctttgg
                                                                     2160
tagagtgacc ttctcttgaa gaatattgtt cccgtagttc cagagggtgc cagctgggtt
                                                                     2220
taacccacta ttgaagggaa ggaagaggca tctcctt
                                                                     2257
```

```
<210> 5926
<211> 1297
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (179)...(753)
<223> similar to gi1841555 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5926 cggacgcgtg ggcaagccag gaaggccctg gagaatccgg tgtgcccct cctccqqcaq 60 agettgggcc tgggctcacg aggaaggggc tgcagttctc caaggattcc cqcctqctcc 120 cagacccccg ggagtcgtag gaacccgttc ctggacgctg acgtcggctt tcagggatcc 180 ctcgccggac gccgcggagg gacagagcct gggaagccgt cgccccgcc cgtccccgcc 240 cccgcgcgca gtgggcccgg ggcgctgaga cccgcgtaga gcaaagcgca aggtcccagc 300 gccccttgga tcctcggtgg cagggtccgg gcaagtgtca ttgcqaqqqt tcaqqaagcc 360 ccggcctgtg atcgtgagcg gaaacccctc ctggagtttc cccaaagcca tggacagccc 420 tagtettegt gagetteaac ageetetget ggagggeaca gaatgtgaga eeeetgeeca 480 gaagcctggc aggcatgagc tggggtcccc cttaagagag atagcctttg ccgagtccct 540 gaggggtttg cagtteetgt cacegeetet teeeteegtg agegetggee tgggggaace 600 aaggccccct gatgttgagg acatgtcatc cagtgacagt gactcggact gggatggagg 660 cagccgtctt tcaccatttc taccccacga ccacctcggc ttggctgtct tctccatgct 720 gtgttgtttc tggcccgttg gcatcgctgc cttctgtcta gcccagaagc atccccagtg 780 cctgacctat agtaggtgct acgtatctgc ttttggaata catgcatgaa tgaatgaatg 840 ggtatgttgg gtgggggagg gaccagggga agggtctggg actgagggga tgcctgggtc 900 actgctgccc actgcctcta cagaccaaca aggcttgggc caagggggac atccaggggg 960 caggggccgc ctcccgccgt gccttcctgc tgggggtcct cgccgtcggg ctgggcgtqt 1020 gcacgtatgc ggctgccctg gtgaccctgg ccgcctacct tgcctcccga gacccgccct 1080 agttgcccct acagccctca ctgtgaaccc tgaggccggc agcccagcaa atctgtgggc 1140 agagagtgga gaatcttggt ggatgaggct gcggcggcgg caggagcatc tagaaacggg 1200 agcgagctgg actggaaccc ttccccttcc tggccaccgc tcttcgggcg gcagcaacct 1260 gagattaaac accagacacc cttgcagcca aaaaaaa 1297

```
<210> 5927
<211> 2548
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (170)...(2039)
<223> similar to gi402649 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5927 agccgcaaac ccagcggagg gcgggaagaa ggaggaggcc tctagggtgg tcgggggact 60 gggggccccg ccggcagagg tccctcggcc tcctgactga ctgactgcgg ccgcctccgg 120 caaggtacgc tagggagctg cctgacggga aggtgcgggg agcggacgca tggcctccgg 180 tgctttataa cccgtatata gagataattg aacaacccag gcagagggga atgcgtttta 240 gatacaaatg tgaagggcga tcagcaggca gcattccagg ggagcacagc acagacaaca 300 accgaacata cccttctatc cagattatga actattatgg aaaaggaaaa gttgagaatt 360 acattagtaa caaaagaatg acccatataa acctcatcct catgatttag ttggaaaaga 420 ctgcagagac cggctactat gaagcagaat ttggacaaga accgcagacc ttttgttttt 480 ccaaaatttt gggtattcga tgtgtgaaga aaaaagaagt aaaagaggct gataattaca 540 aggaataaag gcaggaatca atccattcga tgtcccctga aaacagctga atgatattga 600 agattgtgac ctcgatgtgg tgagactgtg gtttcgagtt tttctccctg atggacatgg 660 taatttgagc gactgctctt cctcctgtgt gtctcgagcc caatttatga caaccgtgct 720 ccaaatactg cagaattaag ggtctgtcgt gtaaacaaga attgtggaag tgtcagagga 780 ggagatgaaa tatttctact ttgtgacaaa gttcagaaag atgacataga agttcgtttt 840 gtgttgaacg attgggaagc aaaaggcatc ttttcacaag ctgatgtaca ccgtcaagta 900 qccattgttt tcaaaactcc accatattgc aaagctatca cagaacccgt aacagtaaaa 960 atgcagttgc ggagaccttc tgaccaggaa gttagtgaat ctatggattt tagatatctg 1020 ccagatgaaa aagatactta cggcaataaa gcaaagaaac aaaagacaac tctqcttttc 1080 cagaaactgt gccaggatca cgtagaaaca gggtttcgcc atgttgacca ggatggtctt 1140 gaacteetga cateaggtga tecacecace ttggeeteee aaagtgetgg gattacagtt 1200 aattttcctg agagaccaag acctggtctc ctcggttcaa ttggagaagg aagatacttc 1260 aaaaaagaac caaacttgtt ttctcatgat gcagttgtga gagaaatgcc tacaggggtt 1320 tcaagtcaag cagaatccta ctatccctca cctgggccca tctcaagtgg attgtcacat 1380 1440 cgctcaggca atacaaaccc actgagtagt ttttcaacaa ggacacttcc ttctaattcg 1500 caaggtatcc caccattcct gagaatacct gttgggaatg atttaaatgc ttctaatgct 1560 tgcatttaca acaatgccga tgacatagtc ggaatggaag cgtcatccat gccatcaqca 1620 gatttatatg gtatttctga tcccaacatg ctgtctaatt gttctgtgaa tatgatgaca 1680 accagcagtg acagcatggg agagactgat aatccaagac ttctgagcat gaatcttgaa 1740 aacccctcat gtaattcagt gttagaccca agagacttga gacagctcca tcagatgtcc 1800 tcttccagta tgtcagcagg cgccaattcc aatactactg tttttgtttc acaatcagat 1860 gcatttgagg gatctgactt cagttgtgca gataacagca tgataaatga gtcgggacca 1920 tcaaacagta ctaatccaaa cagtcatgtt tttgttcaag atagtcagta ttcaggtatt 1980 ggcagtatgc aaaatgagca attgagtgac tcctttccat atgaattttt tcaagtataa 2040 cttgcaagat ttaaatcctt ttaaatcttg ataccaccta tatagatgca gcattttgta 2100 tttgtctaac tggggatata atactatatt tatactgtat atataatact gactgagaat 2160 ataatactgt atttgagaat ataaaaaact tttttcaggg aagaagcata caactttgga 2220 catagegaat acaaaattgg aagetgteat aaaaagacaa etcagaggee aggegeaggg 2280 gctcacacct gtaatcctag cactttggga ggccaaggcg ggtggatcac ttgagaccag 2340

```
gaattcgaga ccagcctggc caacatggtg aaaccccgtc tctactaaaa atacaaaaat 2400 tagctgagca tggtggtacg tgcctgtact gtcagctact tgggaggctg aggcacaata 2460 attgtttgaa cccaggaagc agaggttgca gtgagctgag atcacaccac cgcactccag 2520 cctgggtgac agagtgagac tctgtctc 2548
```

```
<210> 5928
<211> 959
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (829)...(867)
<223> similar to gi2828026 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5928 cagagcgaga ccctgtctca cgaaaaacaa aaacgatcaa aaaqctccca aataacatgg 60 atggggacag gcgccatgaa gggctgacat gggagggaga cataggcagt ggctggcagg 120 gggcaggtgg ggatgggggt cagggggagg aggtqcctqc tqqqcctaqt qtqtcatqtc 180 ccctccacac acgccaccaa actcccactg ctccgagccg cactacatcc ctgctcccca 240 gcctaggggc tgtgctgggg cctgaccctt tgtgagctct cctcagtccc agtcaagtgg 300 acctectece teceteteca cagecettge cettgtecag gecaceatea ceateaceaa 360 caccateett gecageetgg agteeeetet etteattetg tggggetaat gggggtgget 420 gtgtgggaag cctctggggt ctaccgttgg ggagctctgc atggctgagg ttgggggttc 480 totgggaacc tgtggccaag ggtctctggt cacagtgccg aggtgggcct ggcttttcca 540 cagtggagtc cattgatgat tacgtgaacg ttccggagag cggggagagc gcagaagcgt 600 ctctgggtga gtgaccggtg cttgtcggtg cctgcccttq cacccqctq ccccaccatq 660 ctctcagtgt gaccagatcc caccctgggg ctacccacac cctctgcccc ctctgtctgg 720 gcgtcccctt gctctctcgc cctcctgacc cctttqcgtq gctqcccctc cttctqatct 780 gtccccacag atggcagccg ggagtatgtg aatgtgtccc aggaactgca tcctggagcg 840 gctaagactg agcctggtgt gttctgcggg aggggcagga gctggggtag ctgctttggg 900 cttgggggga tagcttgcaa gctggagacc aacctccct cccttacagc cgcctgag 959

```
<210> 5929
<211> 1424
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (280)...(1186)

<223> similar to gi4586838 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5929
ttqttgggta tcctgatgat ggcaaatgtc ttcatttatt ttattatgga agtctccaaa
                                                                       60
agcagtagcc aagaaaaaaa tggaaaaggg gaagtaataa tacccaaaga gaagttctgg
                                                                      120
aagatatcta cccctcccga ggcatactgg aaccgagagc aagagaagct gaaccggcag
                                                                      180
tacaacccca tcctgagcat gctgaccaac catacggggg aggcgggcag gctctccaat
                                                                      240
ataagccatc tgaactactg cgaacctgac ctgagggtca cgtcggtggt tacgggtttt
                                                                      300
aacaacttgc cggacagatt taaagacttt ctgctgtatt tgagatgccg caattattca
                                                                      360
ctgcttatag atcagccgga taagtgtgca aagaaacctt tcttgttgct ggcgattaag
                                                                      420
teceteacte cacattttge cagaaggeaa ggeaateegg gaateetggg gecaagaaag
                                                                      480
caacgcaggg aaccaaacgg tggtgcgagt cttcctgctg ggccagacac ccccagagga
                                                                      540
caaccacccc gacctttcag atatgctgaa atttgagagt gagaagcacc aagacattct
                                                                      600
tatgtggaac tacagagaca ctttcttcaa cttgtctctg aaggaagtgc tgtttctcag
                                                                      660
gtgggtaagt acttcctgcc cagacactga gtttgttttc aagggcgatg acgatgtttt
                                                                      720
tgtgaacacc catcacatcc tgaattactt gaatagttta tccaagacca aagccaaaga
                                                                      780
tctcttcata ggtgatgtga tccacaatgc tggacctcat cgggataaga agctgaagta
                                                                      840
ctacatecea gaagttgttt actetggeet etacecacee tatgeagggg gagggggtt
                                                                      900
cctctactcc ggccacctgg ccctgaggct gtaccatatc actgaccagg tccatctcta
                                                                      960
ccccattgat gacgtttata ctggaatgtg ccttcagaaa ctcggcctcg ttccagagaa
                                                                     1020
acacaaaggc ttcaggacat ttgatatcga ggagaaaaac aaaaataaca tctgctccta
                                                                     1080
tgtagatctg atgttagtac atagtagaaa acctcaagag atgattgata tttggtctca
                                                                     1140
gttgcagagt gctcatttaa aatgctaaaa tagatacaaa ctcaattttg catagaaagg
                                                                     1200
tgtattttga atagttccca tgttgtgttc tcacattata gtaatttcta tattatacca
                                                                     1260
tgaaaattgt ctttatgagt gatacccaat tgagggcctc taaacctttc tctttgttac
                                                                     1320
taaccttatc attgatagtc ttatttgttt ttttcttttt tatctctctt gtgtattctt
                                                                     1380
tcatctttat tcttactatt tgtactatct cttttatata ttcg
                                                                     1424
     <210> 5930
     <211> 2634
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (95)...(2042)
     <223> similar to gi5901872 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5930
tttcgtaaga cgacgaggag gctgcgaaaa gttaagggcc ggaccgcagg ctgtgctcgc
                                                                       60
ttccggaagt ggcttctgcg acaacatgct tgcggacctc ggcttaatcg gaaccatagg
                                                                      120
cgaggatgac gaggtgccgg tggagcccga gtctgactcc ggggacgagg aagaggagg
                                                                      180
gcccattgtg ctgggcagac gacaaaaagc tttggggaag aaccgcagtg ctgatttcaa
                                                                      240
ecetgattte gtttteactg agaaggaggg gaegtaegat ggeagetggg eeetggetga
                                                                      300
tgtcatgagc caactcaaga agaagagggc agccactaca ttaqatgaga agattgagaa
                                                                      360
agttcgaaag aaaaggaaaa cagaggataa agaagccaag tctgggaagt tggaaaagga
                                                                      420
gaaagaagca aaggaaggct ctgaaccaaa ggagcaggaa gaccttcaag agaatgatga
                                                                      480
ggaaggctca gaagatgaag cctcggagac tgactactca tcagctgatg agaacatcct
                                                                      540
caccaaagca gatacactca aagtaaagga tcggaagaag aagaagaaga aaggacagga
                                                                      600
```

```
aqcaqqagga ttttttgaag atgcatctca gtacgatgaa aacctctcgt tccaggacat
                                                                      660
gaacctttcc cgccctcttc tgaaggccat tacagccatg ggcttcaagc agcccacccc
                                                                      720
gatccagaag gcgtgcatac ctgtgggtct attggggaag gacatctgtg cctgtgcagc
                                                                      780
cactgggaca ggtaaaactg ccgcctttgc cctgcctgtt ttggagcgtc tgatttataa
                                                                      840
accccgccag gctccagtca cccgcgtgct ggtgctagtg cccacccgag agctgggcat
                                                                      900
ccaggtgcac tctgtcacca gacagctggc ccagttctgc aacatcacca cctgcctggc
                                                                      960
tgtgggcggc ttggatgtga agtctcagga agcagctctt cgggcagcgc ctgacatcct
                                                                     1020
categocace ccaggoogge teategatea ectecacaae tgecetteet tecacetgag
                                                                     1080
cagcatcgag gtgctcatcc tggacgaggc tgacaggatg ctggatgagt actttgagga
                                                                     1140
gcagatgaag gagatcatcc gaatgtgttc ccaccaccgc cagaccatgc tcttctcggc
                                                                     1200
caccatgaca gacgaggtga aagatctggc ttctgtctcc ttgaagaatc ctgtccggat
                                                                     1260
atttgtgaac agcaacacag atgtggctcc cttcctgcgg caggagttca tccggatccg
                                                                     1320
gcctaatcgt gaaggagacc gggaagccat cgtggcagct ttgttgacga ggaccttcac
                                                                     1380
tgaccatgtg atgctgttca cgcaaaccaa gaagcaggcc caccgcatgc acatcctcct
                                                                     1440
ggggctcatg gggctgcagg tgggtgagct ccatggcaac ttgtcacaga cqcaqcqct
                                                                     1500
ggaggccctc cggcgtttta aggatgaaca gattgacatc ctcgtggcca ctgatgtggc
                                                                     1560
agcccgtgga cttgacattg agggggtcaa aacggtaatc aacttcacaa tgcctaatac
                                                                     1620
catcaaacat tatgtccacc gggtggggcg aacagcacgt gctggcaggg ctgggcgctc
                                                                     1680
agtctctctg gtgggagaag atgagcggaa gatgctgaag gagattgtaa aagctgccaa
                                                                     1740
ggcccctgtg aaggccagga tacttcccca agatgtcatc ctcaaattcc gggacaagat
                                                                     1800
tgagaaaatg gagaaagatg tgtatgcagt tctgcagcta gaggcggagg aaaaagagat
                                                                     1860
gcagcagtca gaagcccaga tcaatacagc aaagcggctc ctggagaagg ggaaggaggc
                                                                     1920
agtggtccaa gagcccgaga ggagctggtt ccagaccaaa gaagagaga agaaggagaa
                                                                     1980
aattgccaaa gctctgcagg aatttgactt ggccttaaga ggaaagaaga aaaggaagaa
                                                                    2040
gtttatgaag gatgccaaaa aaaaggggga gatgacagca gaggaaaggt ctcagtttga
                                                                    2100
aatcctcaag gcgcagatgt ttgctgaacg gctagcgaag aggaatcgca gagccaagcg
                                                                    2160
ggcccgagca atgcccgagg aggagccagt gagaggtcct gccaagaagc aaaagcaggg
                                                                    2220
gaagaaatct gtatttgatg aagaactcac caacacaagc aagaaggccc tgaaacagta
                                                                    2280
tcgagctggc ccttcctttg aagaaaggaa acagttgggc ttgccccacc agagacgagg
                                                                    2340
aggaaacttt aaatctaaat ccagatacaa gaggaggaag tagctgtcgt ggcctgaaga
                                                                     2400
aattcatggg ggcagccctt aaatcccttc cctgtgggaa gtcatcctgg ctggtctgtc
                                                                     2460
ttttctccat ttgtttaaaa aaaaacaaa aacaaaaaac aacactttgg tgtggtg
                                                                    2520
tggtacgtag ctattttcct aagcatgtct gtcaatctcc cttcttgctg attagctttc
                                                                    2580
atagactatt attaaatgga agtatttttg ggaaaagaga aaccaaaaaa aaaa
                                                                    2634
```

```
<210> 5931
<211> 897
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (889)...(162)
<223> similar to gi33724 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

```
<400> 5931
ttttttttt ttctgattga caatgagaat atttattgag ggtttattga gtgcagggac 60
gaagggcttg atgcccctgg ggtgggagga gagacccct cccccgggaa tcctgcagct 120
ctagtcctcc cgtggtgggg ggtgaggggt tgagaaccta tgaacattct gtaagggcc 180
```

```
actgtcttcc tcccacggtg ctccccttca atgcgtgacc ctggcaactg taaccttctg
                                                                      240
tgggacttcc cactgctcaa gccgtcaagc ctaagataag ctgctggccg cgtacttgtt
                                                                      300
gttgctttgt tgtggagggt gtggggggt ctccactccc qccttqacqq qqctqctatq
                                                                      360
ctgccttccc aggccacttg tcacggctcc cggggtagaa qtcacttatq qaqacacacc
                                                                      420
aqtqtggcca ttgttgggct tgaagctcct cagaggaggg ctgggaacag agtgacccga
                                                                      480
ggggagcagc cttgggctgg acctaaggac gggtaagctt ggtcccctcc gccgaatacc
                                                                      540
acatgateae tactactate ceacacetga cagtaatagt cateceteat ceatageetg
                                                                      600
tgtcccqctq atggtcaaag tggctgttgt tccagagttg gagccataga atcgtttatg
                                                                      660
gatccctgag ggccggtcgc tatcaccata gacgaccagc acaggggcct ggcctggctt
                                                                      720
ctgctggtac cagtgcacac ttttacttgc aatgttgatt cccccacagg taatcctggc
                                                                      780
cgcctttcct ggggccactg acaccgaggg tggctgagtc agcacatagg aggtcacaga
                                                                      840
gcctgtgcag tgagagagga ggccgaggag gagaacgqtc caggccatgg ctgaggc
                                                                      897
```

```
<210> 5932

<211> 2352

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (102)...(1508)

<223> similar to gi3878119 in the genepept database release 114,

Run with FASTXY 3.3t00, default parameters
```

tttcgtctgc gcgagagttt ctgctcgctc aaccgagttg tcgtgttgcc ctcgcttctc 60 agatccccgc cggaagtgaa gagagcaagc agatttgaac ctatctgctt tcaagctqqt 120 catcatgatg aaacttagac acaaaaataa aaagccaggt gaaggttcca agggccacaa 180 gaagataagt tggccctacc ctcagcctgc aaagcaaaat gggaagaaag caacctccaa 240 agtgccctct gcacctcatt ttgttcaccc caatgatcat gccaatcgag aggctgaatt 300 aaagaagaag tgggttgagg agatgaggga gaagcagcaa gccgcccggg agcaagaaag 360 acaaaaacgc aggaccattg agagctactg tcaggatgtc ctaagacgcc aggaggagtt 420 tgagcataag gaggaagttt tgcaggaatt aaatatgttt cctcagctgg atgacgaggc 480 cacgaggaag gcttattaca aggagttccg taaggtggtg gaatactctg atgtgattct 540 ggaagtcctg gatgccagag acccattagg ctgccgctgc ttccaaatgg aggaggctgt 600 cctgcgagca caaggcaaca agaagctggt cctggtcttg aacaagattg acctggtccc 660 caaggaggtt gtggagaaat ggctggatta ccttcggaat gagttgccaa ccgtggcttt 720 caaggccagt acccagcatc aggtcaaaaa cctgaatcgt tgcagtgtgc cagtagatca 780 ggcctctgag tcactgctga aaagcaaagc ctgctttgga gctgaaaacc tcatgagggt 840 tctggggaac tattgccgcc ttggtgaagt gcgcacccac attcgtgtgg gtgttgtggg 900 tetteceaat gttgggaaga geageetgat caatageetg aagegeagee gegeatgeag 960 cgtgggagct gttcctggaa ttaccaaatt catgcaggag gtctacctgg acaagttcat 1020 ccggctcttg gatgctccag gcattgtccc agggcccaac tcagaggtgg gcaccatcct 1080 gcgtaactgc gtccacgtgc agaagctggc agaccctgtg accccagtgg agaccatcct 1140 gcagcgctgc aacctggagg agatttccaa ctattatggc gtctctgggt tccagaccac 1200 tgagcacttt ctgacggcag tggcccaccg tttggggaag aagaagaagg gaggcttata 1260 tagtcaggaa caggcggcca aagctgtcct agctgactgg gtgagcggga agatcagctt 1320 ctatatacca ccaccagcca ctcacactct gcccacccat ctcagtgctg agatcgttaa 1380 ggaaatgacc gaggtctttg acatcgagga tactgagcag gccaatgaag acaccatgga 1440 atgcttggcc accggagaat ctgatgagct gttgggtgac acggacccac ttgaaatgga 1500

```
gatcaagttg ctccattctc cgatgacgaa aatagcagat gccattgaaa ataaaaccac
                                                                     1560
cgtgtataag attggagatc tcactgggta ttgcaccaat ccgaaccgtc atcagatggg
                                                                     1620
gtgggctaaa cgcaatgtgg accaccgccc taagagcaac agtatggtgg atgtctgctc
                                                                     1680
agtggaccgc cgctcagtgc tgcagaggat catggagacg gaccccctgc aacagggcca
                                                                    1740
ggctctggca tctgccctga aaaataagaa gaagatgcag aaacgtgcag ataaaatcgc
                                                                     1800
cagcaagctg tctgattcca tgatgtctgc tctcgacctc tctggcaatg ctgatgatgg
                                                                    1860
tgttggtgac taatcgactg atctcacttc ccttccgctc caagcaccag ttccggtggt
                                                                    1920
acgggggaat accagtgaaa tagtttggtt ctccctgaag catctgcata ttgaaagaac
                                                                    1980
gctttcccca ctgtgtgtct tctcccctc ctccagtaaa aacagtcccg gctgggtgct
                                                                    2040
gtggctcacg tctgtaatcc cagcactttg ggaggccgag gtgggcggat cacctgaggt
                                                                    2100
cgggagttcg agaccagcct ggccaacatg gtgaaacccc gtctctacta aaaatacaaa
                                                                    2160
aaaatttagc cgtgcttagt ggcacctata gtcccagcta cttgggaggc tgaggcagga
                                                                    2220
gaatcgcctg aacctgggag actaaggcgg gagaatcqcc tggacctqqq aqqcaqaqqt
                                                                    2280
tgcagtgagc ccagacccca ccattgcact ctagcctggg caacaacccg aaactccgtc
                                                                    2340
ccaaaaaaa aa
                                                                    2352
```

```
<210> 5933
     <211> 1081
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (242)...(443)
     <223> similar to gi3002527 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5933
cgctttcggc atggaggaaa tttatgcgaa gtttgtgtcc cagaaaatca gcaaaacccg
                                                                       60
ctggcgaccg ctgcctccgg gaagtttaca gaccgcggag acgttcgcta caggatcttg
                                                                      120
ggacaatgag gaaaattata tttcactgtg gtctattgga gattttggaa acttggactc
                                                                      180
tgatggaggg tttgaaggag accatcagtt attgtgtgat atcagacacc atggtgatgt
                                                                      240
aatggattta cagttttttg accaggaaag aattgtcgct gcttcatcaa caggatgtgt
                                                                      300
aacagttttc cttcaccatc caaataacca gactctgtca gtcaaccagc agtggactac
                                                                      360
ageteactae caeacaggee etggeagtee tteetatage agtgeaceat gtacaggtgt
                                                                      420
tgtgtgcaac aacccaaaaa tcgttacagt tggagaggat ggtcgaataa atctcttcag
                                                                      480
agctgatcac aaggaagctg taagaaccat agacaatgca gatagtagta cactccatgc
                                                                      540
tgtaacettt ettegaacte etgagattet taetgtaaat teaattggae agttgaaaat
                                                                      600
atgggatttc agacaacaag gaaatgagcc ttctcagatt attgtcactg actggtgacc
                                                                      660
gagtgccact ccactgtgtt gatagacatc ccaaccaaca gcatgttgta gctactggtg
                                                                      720
gccaagatgg aatgttgagt atttgggatg ttagacaagg tactatgcct gtatctctgc
                                                                      780
tgaaggctca tgaagctgaa atgtgggaag ttcactttca cccatccaac ccagaacatc
                                                                      840
tttttacctg ctctgaagat ggatccctct ggcactggga tgcttccaca gatgtacctg
                                                                      900
aaaagtcgtc actctttcac caagaaaaat tctggagcgg agagcatgtg tggagcatgc
                                                                      960
atgcatgtcc atgctataac ttcatctaca gagaaacaaa cagtttcatc taaggattaa
                                                                     1020
ctaagaggaa gaagcagtac ttttttgtct cataqcatta qtaaccaagc taatqttcac
                                                                     1080
С
                                                                     1081
```

```
<210> 5934
<211> 1898
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1868)...(611)
<223> similar to gi1842105 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5934 cgtcgacttt ttttttttaa agtttcatag tggttctctt atttataaaa taatcacatt 60 caagtettae cagagagtag caaagtette aatteettte ettteetttg aagaaataat 120 gtagagcaat cactcataaa tccctctaat tataaataaa atccaagata ttatttgaca 180 atgagatgct ttatttaaac ttgatacatt tactatataa gaattctgtg aaaaaatggg 240 gtatgaaatt attttggatc tgaatctttg cattataaaa tctaacccaa aactatgtca 300 360 ggcaaaacaa gacaagtttc agctgacttc cccatggtgt tacaagttct cctagtgaag 420 taaaaaagtcc caacccctct ttctatgcat gtcatctcca ggaaggtaag ctttgggaag 480 cacctgcgcc agccctatat ctgtgcttgg catgaggttc acacaggttc ggccttgaga 540 tggggatgtt cctctcaacc aaacaactct acttgaatta ttccgagact ccttggaggg 600 gtgaaacttc aggcctgggt gtctctgcag tgagatgtct gtggttggta aacagttctg 660 tagagtettg ttetactgat etttetteta ggtetgaete tgggattgta gtacaaccae 720 ctggcatgac catggtctgg tgggggctgc tgcatcggta cttaggcaga gacggccacc 780 tttggataat ctatcgcaga gcaaggtgat atgtttcttc agttggcttg tgtcctttgg 840 gtatgttcaa gctggctgtt gaaggttcaa aagcctgctc ccttagaaac tcttcgacag 900 gcaagtcttc caacaggtgg gaaatggcgg catccaccgt ttcttcccag cccaattctt 960 gagtgtcttc ttgtagcggc agaaatgccg cttccagaat agcaacctgg tcagcactaa 1020 qcttctgcca cagcgcgatc agcagaatca ccaaatgggt ggcactcttc agcctggtga 1080 atgactggaa cagattgcct tggttttcct ccactgcatc tgctagagca attacctgct 1140 tgtaggttcc atctaacaag gtgtccaggt gttgaagagg ggcaggagtt ttatctttga 1200 atcttgctag tagccggcgt tgaatggccc gaaattgtac agctctctca gataagagtt 1260 cttctaattt ttcaccattt atccgtagct caaaatggat ggatccaatc aactccaaaa 1320 tattccttga aaggggtaat agatccccga aaaagaacat gcaaaatctt tgactccctg 1380 tttttcaaaa tattcttgaa ggcgaagaat aagctcattg gttaatgaag cccaaagatc 1440 cttcaaattg ttccactcct ggaatgcgaa tatccgttga agaagttttg gaagcaagaa 1500 cagtaattcc gagcacctcc ctaagaagtg aaaacccatt acattcacct gatcatcatc 1560 tgactgactg gcaaaacctg ggaagagact aagaagactg actggagatt tgttggtatc 1620 aatagtaatt ttgtggcttg cagtttttga aggctgacct ggtaggcaaa ttaactttag 1680 gggaagtcta aatttacatt ggataactcg cggaatgcca tcaggatttc gattcataaa 1740 ttcaaaggtg aactgatcac aagtcaattc taatggtggt tgcacgtaga ctgataattt 1800 ggctttttgc aatatcactc tgttctgcag tgtgaccttc accgtgacag aagggacaag 1860 gtcagttccc acctcaacat cggtcgcttg agaaactg 1898

<sup>&</sup>lt;210> 5935

<sup>&</sup>lt;211> 704

<sup>&</sup>lt;212> DNA

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (697)...(698)
     <223> similar to gi522145 in the genepept database release 114.
       Run with FASTXY 3.3t00, default parameters
     <400> 5935
cggcacgaga tcatctcagt gagacaggtt aactctatca cagccacaga gctgataatg
                                                                       60
cagtgagtcc cagatataaa cctcatttgt ctaatcccag agaattctct aggtgacttt
                                                                      120
ttcaggataa gacacagttt tatctttatg aaaatttcct taacttttca ggagagaagg
                                                                      180
ctcttatgac cgatacctac gaatggatga ctattgcagg agaaaggatg actcttattt
                                                                      240
tgaccgttac agagatagct ttgatggacg gggccctcca ggcccagaaa gtcagtctcg
                                                                      300
tgcaaaaggt aaagtagctg aaacagtcta ttcctattat tgatagaaca ctttacaaaa
                                                                      360
gagagagaa actaataacc agtaccccca tctgaaaaag ggctagtgcc ttggccaagc
                                                                      420
agtgtataaa aagaagaaat ataagtagct tattagtggg taaagagcat ttggcttgaa
                                                                      480
aatgattttt aagatgcaaa ttagtaccat catctggttt agtcatccaa caagaagaaa
                                                                      540
taaatatgaa attccagcaa taagaaatga acaaaatgct ggtcactgtg gccaccacct
                                                                      600
gtaatcctag cactttggaa ggccaaggcc ggcagatcac ttgagcccag gagttcgaga
                                                                      660
ccagcttaag caacatgata aaaccccatc tctacaaaaa aaaa
                                                                      704
     <210> 5936
     <211> 2203
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (775)...(1647)
     <223> similar to gi173157 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5936
tttcgtgacc gatggagatg gcggctgcgg ctgagtgacg gacggtggag gcccagagcc
                                                                       60
cgggcctgaa gggggggaca aacctgggtg cccgcaggag cccggcaggg tgtcttacaa
                                                                      120
gtatcaagaa cttactatat gtggttgaat aaacaatcaa ggtaaagagc atcaagtaaa
                                                                      180
aacttctgct tgttgataag tacttcagac attcccccag tggctgaagt ggcatatgaa
                                                                      240
ttatgaagtt ggatcatttg gaatgaatgt aagagaattg ccaagggctc ctcctactcc
                                                                      300
agagaggaaa cctcatccag ggccatgaag ccacttcctc accatctgtg tgctgcttaa
                                                                      360
gctaatgctg cgggaaccat ggttccttgg gaggaatcaa gctgactctt ggcatgagat
                                                                      420
tectgeette etagggttga gageggeact gecatggett etetggaega eccaggggaa
                                                                      480
gtgagggagg gcttcctctg ccctctgtgc ctgaaggatc tgcagtcttt ctatcagctt
                                                                      540
cactcacatt acgaggaaga acactcaggg gaagaccgtg atgtcaaagg gcaaattaaa
                                                                      600
agtcttgtcc agaaggctaa aaaagcaaag gccaggttgt tgaaacgaga aggggatcat
                                                                      660
cgagcagagt cagggaccca aggatatgag tctgtcagct atggaggggt tgatccgtac
                                                                      720
atgtgggaac cccaggagcg tggtagctgt gactatgcca tctttccgac ttcaaaaaac
                                                                      780
```

```
accgagctgc tagaattgac cactatgttg tggaagtcaa taaactaata atcaggttag
                                                                      840
agaagctcac tgcatttgac agaacaaata ctgagtctgc aaagattcga gcaatagaaa
                                                                      900
agtctgtggt gccttgggtc aacgaccagg atgtcccttt ctgtccagac tgtgggaata
                                                                      960
agttcagcat ccggaaccgc cgccaccact gccgcctctg cgggtctatt atgtgcaaga
                                                                     1020
agtgtatgga gctcatcagc cttcccttgg caaacaagct caccagtgcc agcaaggagt
                                                                     1080
ccctgagcac ccacaccagc cccagccagt cacccaacag tgtccatggc tcccgccgag
                                                                     1140
gcagcatcag cagcatgagc agtgtcagct cggtcctgga tgagaaggac gatgaccgga
                                                                     1200
tccgctgctg tacacactgc aaggacacgc tgctcaagag agagcagcag attgatgaga
                                                                     1260
aggagcacac acctgacatc gtgaagctct acgagaaatt acgactttgc atggagaaag
                                                                     1320
ttgaccagaa agctccagaa tacatcagga tggcagcatc attaaatgct ggggagacaa
                                                                     1380
cctacagtct ggaacatgcc agtgaccttc gagtggaagt gcagaaagtg tatgagctga
                                                                     1440
tagacgcttt aagtaagaag atcttaacct tgggcttgaa ccaggaccct ccaccacatc
                                                                     1500
caagcaattt gcggctgcag agaatgatca gatactcagc tacacttttt gtgcaggaaa
                                                                     1560
agttgcttgg tttgatgtca ctgccaacca aagaacagtt tgaggaactg aaaaagaaaa
                                                                     1620
ggaaggagga aatggagagg aagagggccg tggagagaca agctgccctg gagtcccagc
                                                                     1680
gaaggettga ggaaaggeag agtggeetgg ettetegage ggeeaaeggg gaggtggeat
                                                                     1740
ctctccgcag gggccctgcc cccttgagaa aggctgaggg ctggctccca ctgtcaggag
                                                                     1800
gtcaggggca gagtgaggac tcagacccgc tcctccagca gatccacaac atcacatcat
                                                                     1860
tcatcaggca ggccaaggcc gcgggccgca tggatgaagt gcgcactctg caggagaacc
                                                                     1920
tgcggcagct gcaggacgag tatgaccagc agcagacaga gaaggccatc gagctgtccc
                                                                     1980
ggaggcaggc tgaggaggag gacctgcagc gggaacagct gcagatgttg cgtgaacggg
                                                                     2040
agttggaacg agaaagggag cagtttcggg tggcatccct gcacacacgg actcggtccc
                                                                     2100
tggacttcag agaaatcggc ccttttcagc tggagcccag cagagagcct cgcacccacc
                                                                     2160
ttgcttatgc tttggatcta ggctcttccc cagttccaag cac
                                                                     2203
    <210> 5937
    <211> 2547
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (221)...(2331)
    <223> similar to gi165652 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

```
<400> 5937
aattteeggt tegaegatee egteeeetgg eggageegge gegeeegggg tgeegeteee
                                                                       60
tgcctggcgc gctccgcacc tggaggtgcc ttgcccctct cctgcccacc tcggaatttc
                                                                      120
cctgtggctc ctttgatcct tcgagtctcc agctcctctc ccttccacct gtttccccca
                                                                      180
agaaaggcag gatcctggtc cctgctacgt ttctggggcc atggctggtc tgggcccgg
                                                                      240
cgtaggcgat tcagaggggg gaccccggcc cctgttttgc agaaaggggg ctctgaggca
                                                                      300
gaaggtggtc cacgaagtca agagccacaa gttcaccgct cgcttcttca agcagcccac
                                                                      360
cttctgcagc cactgcaccg acttcatctg gggtatcgga aagcagggcc tgcaatgtca
                                                                      420
agtctgcagc tttgtggttc atcgacgatg ccacgaattt gtgaccttcg agtgtccagg
                                                                      480
cgctgggaag ggcccccaga cggacgaccc ccggaacaaa cacaagttcc gcctgcatag
                                                                      540
ctacagcagc cccaccttct gcgaccactg tggctccctc ctctacgggc ttgtgcacca
                                                                      600
gggcatgaaa tgttcttgct gcgagatgaa cgtgcaccgg cgctgtgtgc gtagcgtgcc
                                                                     660
ctctctgtgc ggtgtggacc acaccgagcg ccgcgggcgc ctgcagctgg agatccgggc
                                                                     720
tcccacagca gatgagatcc acgtaactgt tggcgaggcc cgtaacctaa ttcctatgga
                                                                     780
```

```
ccccaatggt ctctctgatc cctatgtgaa actgaagctc atcccagacc ctcggaacct
                                                                    840
gacgaaacag aagacccgaa cggtgaaagc cacgctaaac cctgtgtgga atgagacctt
                                                                    900
tgtgttcaac ctgaagccag gggatgtgga gcgccggctc agcgtggagg tgtgggactg
                                                                    960
ggaccggacc tecegeaacg actteatggg ggeeatgtee tittggegtet eggagetget
                                                                   1020
caaggcgccc gtggatggct ggtacaagtt actgaaccag gaggagggcg agtattacaa
                                                                   1080
tgtgccggtg gccgatgctg acaactgcag cctcctccag aagtttgagg cttgtaacta
                                                                   1140
1200
ttcccctagt cccaccgacc ccaagcgctg cttcttcggg gcgagtccag gacqcttqca
                                                                   1260
catctccgac ttcagcttcc tcatggttct aggaaaaggc agttttggga aggtgatgct
                                                                   1320
ggccgagcgc aggggctctg atgagctcta cgccatcaag atcttgaaaa aggacgtgat
                                                                   1380
cgtccaggac gacgatgtgg actgcacgct ggtggagaaa cgtgtgctgg cgctgggggg
                                                                   1440
ccggggtcct ggcggccggc cccacttcct cacccagctc cactccacct tccaqacccc
                                                                   1500
ggaccgcctg tatttcgtga tggagtacgt caccggggga qacttgatgt accacattca
                                                                   1560
acagctgggc aagtttaagg agccccatgc agcqttctac gcggcagaaa tcgctatcgg
                                                                   1620
cetettette etteacaate agggeateat etacagggae etgaagetgg acaatgtgat
                                                                   1680
gctggatgct gagggacaca tcaagatcac tgactttggc atgtgtaagg agaacgtctt
                                                                   1740
ccccgggacg acaacccgca ccttctgcgg gaccccggac tacatagccc cggagatcat
                                                                   1800
tgcctaccag ccctatggga agtctgtcga ttggtggtcc tttggagttc tgctgtatga
                                                                   1860
gatgttggca ggacagcctc ccttcgatgg ggaggacgag gaggagctgt ttcaggccat
                                                                   1920
catggaacaa actgtcacct accccaagtc gctttcccgg gaagccgtgg ccatctgcaa
                                                                   1980
ggggttcctg accaagcacc caggggaagc gcctggggct tcagggcctt gatgggggaa
                                                                   2040
cctaaccatc cgtgcacatg ggttttttcc gctgggattt gactgggagc ggctggaacg
                                                                   2100
attgggagat ccccgcctcc ttttcaagac cccgcccgtg tggcccgcag cggcgaggaa
                                                                   2160
tttttgacaa gttcttcacg cgggcggcgc cagcgctgac ccctccagac cgcctagtcc
                                                                   2220
tggccagcat cgaccaggcc gatttccagg gcttcaccta cgtgaacccc gacttcgtgc
                                                                   2280
accoggatgo cogcagococ accagocoag tgootgtgoo ogtoatgtaa totoaccogo
                                                                   2340
egecactagg tgteeccaae gteeceteeg eegtgeegge ggeageecea etteaeceee
                                                                   2400
aacttcacca cccctgtcc cattctagat cctgcacccc agcattccag ctctgcccc
                                                                   2460
gegggtteta gaegeeete ceaagegtte etggeettet gaacteeata eageetetae
                                                                   2520
agccgtcccg cgttcaagac ttgagcg
                                                                   2547
    <210> 5938
    <211> 847
    <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (538)...(313)
    <223> similar to gil345539 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
    <400> 5938
tttcgtcgca gttcggaagg acccgagtcc cttatctaac cgagagctaa caggtcgggg
                                                                     60
actgcgggac ggaagaggga ggggaagatg aagaaaatcg gtgatgaatg gctggcggaa
                                                                    120
atgattggcg gaaagaaaga gccagttcac agtgcgcctt tgtattcggc gggaaacccg
                                                                    180
gccgaagagg gagctggaaa ggactccgga atccggccgt aattccagcc aatcagggag
                                                                    240
tagagttgcg gcgcggggtt ggggcggggc agtctcgcgg gagatagttt cgcgggttcg
                                                                    300
ggaggcgagt ctccggtttc cgcccagtct ctggggacgc ggtggcgggg tctgaatcgc
                                                                    360
```

420

ctggcttcca gggagttttg ggcgggtccc cgcacgggag cgtggcaggc gctggactcg

<210> 5939 <211> 1171 <212> DNA

```
acaqcagatg tggaactgga gagcttggcg cgccctcata ctttgtcaca cacctacgcc
                                                                      480
accagactgg ggtcgggccc ctccgcgttc tgctctggag ggcctgggtc tqqqcccaqc
                                                                      540
atagcgcttt tagaatctcc tcagctgaat ctgacgctca gccgtaggtg aagcttagcc
                                                                      600
cgctgtttca ggccccgccg atctggaagg agtgtcagag ctggagcgcg cgtggcctca
                                                                      660
tcggtgttgg ggtcaccccg gggttgccag ggctcatgga gggtcgtagt ctggattttg
                                                                      720
tcacccccac gtccccgccc cgcagcaagt ctggggttgg agaactcacg cggtcttcgt
                                                                      780
aagctacatg ccagttgacc ctcgaggagg gatgccccct ccccttaagc gtccacgctg
                                                                      840
gagaagg
                                                                      847
```

```
<213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1)...(1172)
     <223> n = a,t,c or g
     <220>
     <221> misc feature
     <222> (463)...(973)
     <223> similar to gi4406696 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5939
tttcgtgtgt gtgtgagagg gagagacgac gtgaggcgag aggaaaagtc tttagtcggc
                                                                       60
cttaaaagca aacaaatcag agatggaata agagcggtaa ttgcagcaag accgccttga
                                                                      120
ttettgeagt ecagggaget gagegeaeeg egegeateeg gegaggaeag gaggegaeeg
                                                                      180
cgggcgctgc caagggctgc gggactttgg cttttcctca gtaaacaaat cttttgatta
                                                                      240
ctttgacact gtggaataaa gaagcgggga gaaggatcag gctcaccttc acccgcttca
                                                                      300
gggggattcc agcttggatg tcagattcct gaaccgtctt tgccatcgga ggaggaaaca
                                                                      360
catccacaca cgcgcgcgca cactcgcacg ctcagggcca cactcacacg ccgccctcca
                                                                      420
cgatcacaca gcaccagact tcggttccct atgcccctgg atggtgacgg cggattggca
                                                                      480
tcttggaagc gatgcgagag cgataaggct ggcgccggcc cgcaaaagct gcaggagcat
                                                                      540
cgctaggtgt tgccgccacc gggaagcggg gctgcaggat qagtaagaga tacttacaga
                                                                      600
aagcaacaaa aggaaaactg ctaataataa tatttattgt aaccttgtgg gggaaagttg
                                                                      660
tatccagtgc aaaccatcat aaagctcacc atgttaaaac gggaacttgt gaggtggtgg
                                                                      720
cactccacag atgctgtaat aagaacaaga tagaagaacg gtcacaaaca gtcaagtgct
                                                                      780
cctgcttccc tgggcaggtg gcaggcacca cgcgagctgc tccatcatqt qtqqatqctt
                                                                      840
caatagtgga acagaaatgg tggtgccata tgcagccatg tctagaggga gaagaatgta
                                                                      900
aagttettee ggateggaaa ggatggaget gtteetetgg gaataaagte aaaacaacta
                                                                      960
qqqtaaccca ttaacccagg agaaatcaag tgatcctcaa ggctgatgac attgaacatg
                                                                     1020
cgcataggaa acttaactca actcctgagg tgatctttga agatttttat taccactttg
                                                                     1080
aaaagagggc gttcantagt ctattttccc aaggggattt tcngggcctc tttctttgaa
                                                                     1140
ttcaaggatt ttttaaaagt tcagacatga a
                                                                     1171
```

```
<210> 5940
<211> 1468
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (285)...(1390)
<223> similar to gi6010117 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5940 tcccgggtcg acgatttcgt gcgaaaagcc gggactgqac ctagcggagt tqtqcttqtc 60 gccgaagcgg ggtgggcttg ttcgttccgc gcagccgcag ccagaaccgg gtgacgctta 120 180 ctccggagga ggaggcggag gccgaggacc aggaatcacc ttcaagccta tgtcgtgagg 240 ctttggcaga aattaagaag gaaatatctc cattgttcat tggcatggaa aaatgttcag 300 tgggaggatt agagttgact gaacagactc ctgctttatt agggaatatg gccatggcaa 360 ctagtctcat ggacataggg gattcatttg gtcatccagc ttgtccttta gtcagtagat 420 ctaggaactc accagtggaa gatgatgatg atgatgatga tgttgtgttt attgaatcta 480 tacaacctcc ttcaatttct gctccagcaa tagctgatca aagaaacttc atatttgcat 540 catcaaaaaa tgaaaagcct caaggaaatt attctgtaat tcctccttct tcaagagatt 600 tggcatctca gaaaggaaat ataagtgaga caattgttat tgatgatgaa gaggacatag 660 aaacaaatgg aggagcagag aaaaagtctt cctgttttat cgaatgggga cttcctggaa 720 ctaaaaacaa aaccaacgat ttggatttct ccacttccag tctttcaaga agtaaggtaa 780 atgcaggaat gggtaatagt ggtatcacta cagaattgac tctgaaatac attattacta 840 atgttacaac cttagaaaca ggtataagct ctgtgaatgc tgggcaagat gtgaacataa 900 ttattacata taaaacatca ctatagaata ccaacttggg agatgtcgct aaaggacttc 960 agtcaagtaa ttttggtgtt aatatacaaa cgtacacccc atctttaact ccacagacca 1020 agactggagt aagacctttt aaccctggta gaatgaatgt ggcaggagac ttatttcaga 1080 atggagaatt tgcaactcat catagtcctg aagatgcatc tacaaagaag gctaatgtca 1140 ttetteeagt agaateaage aaateettee aagaatttta tagtaeatet tgtttgtete 1200 cctgtgaaaa caactggaat cttaaaaaag gagtttttaa taagtcaaga tgtacaattt 1260 gtagtaaatt agcagaggtc tggattttta tacctaagtt gttgtttagg ctaacagtga 1320 taattttaac ttttaagtgc tattatgtac tctttcatct acataatgca cgtgttctgg 1380 atgtataaca tgaagctgaa aggaagaata aggatatgtt agaactatct tatgggatat 1440 tttataaata aaattccatt tgcatagc 1468

```
<210> 5941

<211> 4397

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)...(4398)

<223> n = a,t,c or g

<220>
```

```
<221> misc_feature
<222> (26)...(2703)
<223> similar to gi1871540 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5941 cagctcggtc gccccaccg gccccatggc agcccccggc gccccagctg agtacggcta 60 catcoggaco gtootgggco agcagatoot gggacaactg gacagotoca qootggcqct 120 gccctccgag gccaagctga agctggcggg gagcagcggc cgcggcggcc agacagtcaa 180 gagcctgcgg atccaggagc aggtgcagca gaccctcgcc cggaagggcc gcagctccgt 240 gggcaacgga aatcttcacc gaaccagcag tgttcctgag tatgtctaca acctacactt 300 ggttgaaaat gattttgttg gaggccgttc ccctgttcct aaaacctatg acatgctaaa 360 ggctggcaca attgccactt atgaaggtcg ctggggaaga ggaacagcac agtacagctc 420 ccagaagtcc gtggaagaaa ggtccttgag gcatcctctg aggagactgg agatttctcc 480 tgacagcagc ccggagaggg ctcactacac gcacagcgat taccagtaca gccagagaag 540 ccaggctggg cacaccctgc accaccaaga aagcaggcgg gccgccctcc tagtgccacc 600 gagatatgct cgttccgaga tcgtgggggt cagccgtgct ggcaccacaa gcaggcagcg 660 ccactttgac acataccaca gacagtacca gcatggctct gttagcgaca ccgtttttga 720 cagcatecet gecaaceegg ecetgeteac gtaceecagg ecagggacea geegeageat 780 gggcaacctc ttggagaagg agaactacct gacggcaggg ctcactgtcg ggcaggtcag 840 gccgctggtg cccctgcagc ccgtcactca gaacagggct tccaggtcct cctggcatca 900 gageteette cacageacee geacgetgag ggaagetggg eccagtgteg eegtggatte 960 cagcgggagg agagcgcact tgactgtcgg ccaggcggcc cgccaggggg aagtgggaat 1020 ctgcctcaac tgagagaaag cactttccac tgactcccca gctggggaat gcaagacatg 1080 gagatgactc tggagcgagc agtgagttat gctcgaggca gaccacatgc cqcccatccc 1140 aggatttctg ctgcagctac tttcattaca gcacgagtgc ttccagaaat ctgaagctcg 1200 gaagagggtt aaccagcttc gtgggcatcc tcaagcttct gcagctccta aaagttcagg 1260 aatgaaggac gtttcagccg agctgtgtgt ggggggcctt gaggaaactt aggtattttg 1320 aaggacaatt gaccaacaaa ttgggaggtg ggctgaacta aatgggggta cctcggctgc 1380 tccagggtgc tgaagcaaac cagagacttg ggagactaaa aaacaaataa cagaccatac 1440 agtcaattta agaagtagga atggctggcc gggcgcggtg gctcacgcct gtaatcccag 1500 cactttggga ggccaaggcg ggcggatcac gaggtcagga gttcgagacc agcctgacca 1560 acatggtttg ctgtggaatt tgtcatctaa tgacaaactc aagaatctca tgataacaga 1620 agcattgctt acgctgacgg agaatatcat catccccttt tctgggtggc ctgaaggaga 1680 ctacccaaaa gcaaatggtt tgctcgattt tgacatattc tacaacgtca ctggatgcct 1740 aagaaacatg agttctgctg gcgctgatgg gagaaaagcg atgagaagat gtgacggact 1800 cattgactca ctggtccatt atgtcagagg aaccattgca gattaccagc cagatgacaa 1860 ggccacggag aattgtgtgt gcattettea taacetetee taecagetgg aggeagaget 1920 cccagagaaa tattcccaga atatctatat tcaaaaccgg aatatccaga ctgacaacaa 1980 caaaagtatt gggatgtttt ggcagtcgaa gcaggaaagt aaaagagcaa taccaggacg 2040 tgcccgatgc cggaggaaaa gagcaacccc aagggcgtgg agtggctgtg gcattccatt 2100 gttataagga tgtatctgtc cttgatcgcc aaaagtgtcc gcaactacac acaagaagca 2160 teettaggag etetgeagaa eeteaeggee ggaagtggae eaatgeegae ateagtgget 2220 cagacagttg tccagaagga aagtggcctg cagcacaccc gaaagatgct gcatgttggt 2280 gacccaagtg tgaaaaagac agccatctcg ctgctgagga atctgtcccg gaatctttct 2340 ctgcagaatg aaattgccaa agaaactctc cctgatttgg tttccatcat tcctgacaca 2400 gtcccgagta ctgaccttct cattgaaact acagcctctg cctgttacac attgaacaac 2460 ataatccaaa acagttacca gaatgcacgc gaccttctaa acaccggggg catccagaaa 2520 attatggcca ttagtgcagg cgatgcctat gcctccaaca aagcaagtaa agctgcttcc 2580 gtccttctgt attctctgtg ggcacacacg gaactgcatc atgcctacaa gaaggctcag 2640 tttaagaaga cagattttgt caacagccgg actgccaaag cctaccactc ccttaaagac 2700 tgaggaaaat gacaaagtat tctcggctgc aaaaatcccc aaaggaaaac acctattttt 2760 ctactaccca gcccaagaaa cctcaaaagc atgccttgtt tctatccttc tctatttccg 2820 tggtcccctg aatccagaaa acaaatagaa cataatttta tgagtcttcc agaagacctt 2880

```
tgcaagtttg ccaccagtag ataccggcca caggctcgac aaatagtggt ctttgttatt
                                                                     2940
agggettatg gtacatgget teetggaate aaaatgtgaa tteatgtgga agggaeatta
                                                                     3000
atccaataaa taaggaaaga agctgttgca ttactgggat tttaaaagtt tgatttacat
                                                                     3060
ttatattcct tttctggttc ccatgttttg tcactcatgt gcacattgct tcgccattgg
                                                                     3120
gcctccagtg tattgttctg cagtgttgaa acagaatgga aatgacaaga aatatctgca
                                                                     3180
gttatccagg gagaaagtat aatgggcaaa attattggtt tctttcttta ctttgtgctt
                                                                     3240
gtttttatcc ccttggggnt gtttttctct ggatttttaa ataaacttac acttaagaaa
                                                                     3300
tttagattac cagagtatgc ctgactgtaa gaaaaagaaa ttgagaggaa gtgatcatag
                                                                     3360
caaattaaag aagtetttte eteecagaae ttaaagtaaa ataaaaaata aataaataaa
                                                                     3420
taaaatettt teeacagaga aaggeaactg tgatgataaa atttaaegtt eeeceaaaca
                                                                     3480
ctgagtcaat gagatttttc tcaggagata ctttacctat aacaacgccg ttaaatccaa
                                                                     3540
atctcttcta aacgatggca ttctatgtaa tgcctttcct ggactttttt ggccactgcc
                                                                     3600
ctggactagt gaaagaatgg actctatctt tatctgcaag aggaactaag gccttctatc
                                                                     3660
agactgcctg gccagcctgg ggcactgaaa atacggctca tgttaatgag ttacattatc
                                                                     3720
agccagccca gccttgccca ccatttaaga aatatcacag agccactaga tctcatatga
                                                                     3780
tcttcttcaa gccattattt taactcaaga aaactctaga gaagaaagt gaagaagtca
                                                                     3840
tgttgaagaa gatgtaagaa tgtgtcaaga ccatccagaa atgatatgag aaatactgat
                                                                     3900
attttaaatg gttgacatca tccagcgaaa tgaatctaca ttaaatgttg ttttaactgc
                                                                     3960
gctatggatt aaaaccattc atataggagt taggtcttta ccaactacta ttctgttatt
                                                                     4020
tttttttttta atctggacaa catttgtccc taggtaggtt agggcaaaaa aattctttca
                                                                     4080
actccttttg gcgaagaaaa ctgtaacaga aaataaattt tgaatgtgta cttaagtctt
                                                                     4140
tattatattt gaaacaattt ttttttcaat tttaaaagct gaatgaagac aacttaggtt
                                                                     4200
gcctaaccta gttcaaaatg aaattattta gataccaatt tttaaaatac tggagagaat
                                                                     4260
ttatatgtct ttttccagag ttctgatgat aagcatttgg agtgcattta ttcctccaga
                                                                     4320
taataaatgt gtgttcagaa ctttttgtgt tttttaaggc attaataaag ccttcqataa
                                                                     4380
tattaaatac aaaaaaa
                                                                     4397
```

```
<210> 5942
<211> 1978
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (524)...(19)
<223> similar to gi5734705 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5942
attcccgggt cgacgatttc gtaaggagat tcggaggaca aagcgagctg ttagggagta
                                                                       60
tttgggagtg gatttggggg ctgaatgcag atcttggtat tgggagggtt tgcatcacqt
                                                                     120
ggcaggtgcg agcccagaga gaccggcgca gggatcctga tcttgaaaga ttgggagagg
                                                                     180
gcaggaggec agtetetatg ggggeggtte eegtaggate accaggtggg ttegegtgee
                                                                     240
cagattgact gcttgtgggt ggcatggcct caggtggaga ggcttgctgc ggactcaggc
                                                                     300
tggcgaatag ccctggcgaa caacgggcgg aggggaaggt gtctttcaag tcggtattta
                                                                     360
ctctgaactg agggaagaaa agaacggagg ccgcgtcaga ccgaqaqctq ctctqcqqcq
                                                                     420
gccagagagg gaatcccaag ctcttaatgg gcgggggtgg gggtagaaat gtcttttct
                                                                     480
attgtgtttg agaccggtaa tattggggag ggggagaaca agtattatcc cacgcagtac
                                                                     540
accccaatct cccagttcat ttcctaatcc ttaaactccg gtttcaaact ccctcgcttt
                                                                     600
getetteagt tgeaggttee gatetttggg tacteeagga getgttetat ageeeetget
                                                                     660
```

```
tctggaccta tggattctcc atctagcgtt tcttcctatt cctcctactc tctcttcg
                                                                      720
tetttteeca cetececagt gaacagtgae tttggettee cetetgatag tgagaggag
                                                                      780
gacaaggggg cccatgggcc caggccagac actgttgggc agaggggagg ttcacggccc
                                                                      840
agcccgggtc ctatccgctg caggcatcga tcgaaggttt ccggtaacca gcatacacca
                                                                      900
tctcatccga aacagcgggg ttcggcttct cctatggcag gatctggggc gaaaagatca
                                                                      960
agagatggtg aactggagac cagtctaaac acccaaggtt gtaccacaga gggagacctg
                                                                     1020
ctgtttgccc agaagtgtaa agaactccaa ggatttatac ctcctctcac agacctactc
                                                                     1080
aatgggctga agatgggtcg ttttgagaga ggattaagca gttttcagca gagtgtggca
                                                                     1140
atggacagga tccagcgtat tgtaggtgtt ttgcagaggc cacagatggg ggaacgttac
                                                                     1200
ctaggaacct tgctacaggt agaagggatg ttaaagactt ggtttccaca aatagctgcc
                                                                     1260
cagaagtcat cattgggtgg tggcaagcat cagctgacca agcattttcc aagccaccac
                                                                     1320
agtgattcag ctgcttcctc tcctgcatct cctatggaaa agatggacca gacacagcta
                                                                     1380
ggacatctag ctttaaaacc aaagcagcct tggcacctca cacaatggcc agctatgaac
                                                                     1440
ctcacctgga tccacaccac tccaatttgc aaccccctc tcagctcccc aggtactatc
                                                                     1500
tcctttagcc atggtccttt aggcactgga accggcattg gcgtcattct tttcctccag
                                                                     1560
catggagtgc aaccettcac ccactctgcc ccaaccaccc agtcccacct actacagcat
                                                                    1620
ctcctgttca ttccctggtg agcctatgaa actatctgga gagggtcctc gttgctacag
                                                                     1680
tttgcccagt aactctgcca ttcaggactg gagctatacc ctatcccctc ccagtctacc
                                                                     1740
caccttggcc agaaagatga ccataggaca ccgggagcag cagagaagcc atcctccagt
                                                                     1800
tgctgctgat gctcatcttc tcaaccttct agcccagggc atacagctgt ccactgtgac
                                                                     1860
ttctaatttg tgtaaatatt tatgtatata tgtattttta ctattaatgt gtgcatttgt
                                                                     1920
gttgagggaa gataaatcct ttctgattaa agaaattttt ttatacctaa aaaaaaa
                                                                    1978
    <210> 5943
    <211> 2000
     <212> DNA
    <213> Homo sapiens
    <220>
    <221> misc feature
    <222> (1)...(2001)
    <223> n = a,t,c or g
    <220>
    <221> misc feature
    <222> (141)...(1587)
    <223> similar to gi3510234 in the genepept database release 114,
      Run with FASTXY 3.3t00, default parameters
```

```
<400> 5943
aagaatgctt gcctctctgg ggcttgagtt tgaaaggcgc cacgaggggc cgggtagcca
                                                                       60
gccctcaagt taagtgcact agcccacggg ttcccgaaaa ggtgggattg gatagctcat
                                                                      120
gctccatctc cccgccacag catggcacct tgggcagtgg ccgctcctcg gacaaaggcc
                                                                      180
cgtcctggtc cagccgctca ctgggtgccc gttgccggaa ctccatcgcc tcctgtcccg
                                                                      240
aggagcagcc ccacgtgggc aactaccgcc tgctgaggac cattgggaag ggcaactttg
                                                                      300
ccaaagtcaa gctggctcgg cacatcctca ctggtcggga ggttgccatc aagattatcg
                                                                      360
acaaaaccca gctgaatccc agcagcctgc agaagctgtt ccgagaagtc cgcatcatga
                                                                      420
agggcctaaa ccaccccaac atcgtgaagc tctttgaggt gattgagact gagaagacgc
                                                                      480
tgtacctggt gatggagtac gcaagtgctg gagaagtgtt tgactacctc gtgtcgcatg
                                                                      540
gccgcatgaa ggagaaggaa gctcgagcca agttccgaca gattgtttcg gctgtgcact
                                                                      600
```

```
attgtcacca gaaaaatatt gtacacaggg acctgaaggc tgagaacctc ttgctggatg
                                                                      660
ccgaggccaa catcaagatt gctgactttg gcttcagcaa cgagttcacg ctgggatcga
                                                                      720
agctggacac gttctgcggg agccccccat atgccgcccc ggagctgttt cagggcaaga
                                                                      780
agtacgacgg gccggaggtg gacatctgga gcctgggagt catcctgtac accctcgtca
                                                                      840
gcggctccct gcccttcgac gggcacaacc tcaaggagct gcgggagcga gtactcagag
                                                                      900
ggaagtaccg ggtccctttc tacatgtcaa cagactgtga gagcatcctg cggagatttt
                                                                      960
tggtgctgaa cccagctaaa cgctgtactc tcgagcaaat catgaaagac aaatggatca
                                                                     1020
acatcggcta tgagggtgag gagttgaagc catacacaga gcccqaggag gacttcgggg
                                                                     1080
acaccaagag aattgaggtg atggtgggta tgggctacac acgggaagaa atcaaagagt
                                                                     1140
ccttgaccag ccagaagtac aacgaagtga ccgcacccta cctcctgctg ggcaggaaaa
                                                                     1200
cttaggaggg tggggaccgg ggcgcccaa ggctggccct ggcacgggtg cgggcgcca
                                                                     1260
acgacaccan caacggaaca agttccagca aaggcaccag ccacagcaaa gggcagcgga
                                                                     1320
gttcctcttc cacctaccac cgccagcgca ggcatagcga tttttgtggc ccatccctg
                                                                     1380
cacccctgca ccccaaacgc agcccgacga gcacggggga ggcggagctt aaggaggaac
                                                                     1440
ggettecagg ceggaaggeg agetteaage acceegggga gtgggagteg agggetgece
                                                                     1500
cccctccagc cccatggtca gcagcgccca caaccccaac aaggcagaga tcccagagcg
                                                                     1560
gcggaaggac agcacgagca cccccaacaa cctccctcct agcatgatga cccgcaggaa
                                                                     1620
cacctacgtt tgcacagaac gcccgggggc tgaqcqcccq tcactqttqc caaatqggaa
                                                                     1680
agaaaacagc tcaggcaccc cacgggtgcc ccctgcctcc ccctccagtc acagcctggc
                                                                     1740
acccccatca ggggagcgga gccgcctggc acgcggatcc accatccgca gcaccttcca
                                                                    1800
tggtggccag gtccgggacc ggcgggcagg gggttggggg tggtttttca acaacacqc
                                                                    1860
cctccaaaga gcaccccgaa atgcaggggc accatcactg atgcccggac acagaacggt
                                                                    1920
cctcataaat tatggggggg ggcaagatct taaaaactgg gaaacatqcc ttqccqcccc
                                                                    1980
tccgaataag catagaagga
                                                                    2000
```

```
<210> 5944
<211> 1105
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (709)...(542)
<223> similar to gi2108256 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5944
tttcgcgtgt gtttagttgt atgagtagat gggagcccta ggaagagagt agacaatata
                                                                       60
aactgggccc agcactgggt ccagggtaac cctaacattc aaaatggggg acagggagca
                                                                      120
ggcaaaagag gctgagaagg agcatccaga gaggtagggg ggaaactggg aggatggttg
                                                                      180
ctcaggaaag aggggagctg actcagccac gcttctcctg gtcccctttg ccttctqqtc
                                                                      240
taaggtatgg ttcagggtgg gtgttcagga gggagaaacc cttcggcctc ccccttccct
                                                                      300
atecetette ceteteteee taccetttte ttteteeegg ettetteete eeetgeetet
                                                                      360
gteettteta ecetteetee etegeageee tetetaetee acceeattee tteteettee
                                                                      420
ctccagtatt ttggttcccc ccacctgtag gcccaggctg aagcccagag ggaacatgaa
                                                                      480
ggageegtge agetgetgga ggtagggege etggaagtgg eeceeagtte eaccatettg
                                                                      540
ggaggaaggc gggggtcctc cagatagagc tgaaatggac tatggcggtg gggagagggg
                                                                      600
ttgcaggagg ggcccttaaa tgctccagga cctgggggag tcccctccac cactggccta
                                                                      660
tttctcaggg tgggcacggc tgggcagggg gctcccaagt ctggtggcag cagtctccca
                                                                      720
ttgctgccac ccccagaggc tgccttcacc ctgagatatc cttccattta ggaactgcta
                                                                      780
```

```
gtcagtccag ggagctgact ggatgatatc cacttaggcc cccttctccg cctcctctc 840 tgggttagca acccacagcg ctcagggttc taacctgttc tctgcttcct ttcctgcaac 900 agtctacctt ggattccatg caggtagcgc ctcgttctcc acttcccac acctctccag 960 gctggctgag ttgcatctcc tccctcaggg cccaggcagt ccccctctct catcagcag 1020 agggggtgtc actgggagca ggcatgagaa tccatagggg gtggagttc cacaggacac 1080 gtgcggctgt ccccttgtcc caggc
```

```
<210> 5945
<211> 6215
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (295)...(5000)
<223> similar to gi2224585 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5945 cccgcaattc ccgggtcgac gattatctgg gcacccggca gccacagcgc agcgagagcg 60 gacggtcgcc atggttccct ccccagccag tcccaggcgc ccggtgcact atgcggggca 120 180 gctggcaaga atctgtacca caacaggttt ttaggcctgg ccgccatggc gtttccttct 240 agaaactccc agagcctacg ccggtgcaag gagccgatcc gatacagcta caaccccgac 300 cagttccaca acatggacct caggggcggc ccccacgatg gcgtcaccat tccccqctcc 360 accagegaca etgacetggt caceteggae ageegeteea egeteatggg eaggagetee 420 tactattcca tcgggcactc tcaggacctg gtcatccact gggacataaa ggaggaagtg 480 gacgctgggg actggattgg catgtacctc attgatgagg tcttgtccqa aaactttctq 540 gactataaaa accgtggagt caatggttct catcggggcc agatcatctg gaagatcgat 600 gccagctcgt actttgtgga acctgaaact aagatctgct tcaaatacta ccatqqaqtq 660 agtggggccc tgcgagcaac caccccagt gtcacggtca aaaactcggc agctcctatt 720 tttaaaaagca ttggtgctga tgagaccgtc caaggacaag gaagtcggag gctgatcagc 780 ttctctctct cagatttcca agccatgggg ttgaagaaag ggatgttttt caacccagac 840 cettatetga agatttecat teageetggg aaacacagea tetteceege eetceeteae 900 catggacagg agaggagatc caagatcata ggcaacaccg tgaaccccat ctggcaggcc 960 gagcaattca gttttgtgtc cttgcccact gacgtgctgg aaattgaggt gaaggacaag 1020 tttgccaaga gccgccccat catcaagcgc ttcttgggaa agctgtcgat gcccgttcaa 1080 agactcctgg agagacacgc cataggggat agggtggtca gctacacact tggccgcagg 1140 cttccaacag atcatgtgag tggacagctg caattccgat ttgagatcac ttcctccatc 1200 cacccagatg atgaggagat ttccctgagt accgagcctg agtcagccca aattcaggac 1260 agccccatga acaacctgat ggaaagcggc agtggggaac ctcggtctga ggcaccagag 1320 tcctctgaga gctggaagcc agagcagctg ggtgagggca gtgtccccga tcgtccaggg 1380 aaccaaagca tagagctttc cagaccagct gaggaagcag cagtcatcac ggaggcagga 1440 gaccagggca tggtctctgt gggacctgaa ggggctgggg agctcctggc ccaggtgcaa 1500 aaggacatcc agcctgcccc cagtgcagaa gagctggccg agcagctgga cctgggtgag 1560 gaggcatcag cactgctgct ggaagacggt gaagccccag ccagcaccaa ggaggagccc 1620 ttggaggagg aagcaacgac ccagagccgg gctggaaggg aagaagagga gaaggagcag 1680 gaggaggagg gagatgtgtc caccctggag cagggagagg gcaggctgca gctgcgqqcc 1740 tcggtgaaga gaaaaagcag gccctgctcc ttgcctgtgt ccgagctgga gacggtgatc 1800 gcgtcagcct gcggggaccc cgagaccccg cggacacact acatccgcat ccacaccctq 1860

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```
atacctccat tactaacaat gaaatatgaa tgcaagttaa gctacacttg accaaatggt
                                                                     5340
aataaatgtt tacttccatt tctatcattg aagggaaaat gtgagcatta agcactccag
                                                                     5400
gctttcatat gcccatgtct tctgagcaga gccaccattt tttataattt ctaataacca
                                                                     5460
actccagaac taggagctga tcaactcttt gttttcctct ccatctactt ttccctgtgc
                                                                     5520
ataatatcca tccaaaggac aacagtggca aagctgaaat ttttatacat tcaactcatg
                                                                     5580
attcacatgt ggcatcagtc ccatcagccg gaactagcct agacatacgg tgcaaatatg
                                                                     5640
acacttctaa cgattaacaa cagcaagaaa acacctgctg ctgatgcaat gcaatgcatc
                                                                     5700
ccaatggttg tggggattgt gggctcaact caagagaagt ttaggagggg qagcatccct
                                                                     5760
agtgaatact cacaccacaa gaaggacaaa cttgtgcaca tgtccaagaa agaaagcttc
                                                                     5820
ttgattgagg tagcataaag gatgaggctt cagcccccat tgtcttatgt agaatgtggc
                                                                     5880
aatgccaact ggagaaaggg aagaaggaca tattaccttg gtttgaatcc ctgagttctg
                                                                     5940
tactgttctg ttttgtttag tctagccaca gttcttcaca aaggaaaaaa aaatgtgtag
                                                                     6000
atgataccat gacttttgtt aaagccatga cttttgtttg cttggcagac aaaccctttt
                                                                     6060
tttaaaactt tgatattttt ttttcacgtt ttttttcct tttcctttct taatcatgga
                                                                     6120
gttcaagttc ctttgcattc gattgtccat cgggaccaca ctaggaagct qcaqagagta
                                                                     6180
atggtgcttg ttagggatca agggcaacat ctatt
                                                                     6215
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<210> 5946
     <211> 1525
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1401)...(572)
     <223> similar to gi3880422 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5946
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tggctgtatc acccaggctg gagtgtatgg cacaaccatt qctcactqcq qcctcaacct
                                                                      120
cctgggctca agtgatcctc ccgcctcagg ctcccaaagt qctqqqataq caqqcatqaq
                                                                      180
ctgtcgcacc tagccagcaa tatacaacct tgaagggtta atagtgacat ggacagaggc
                                                                      240
aaggtgccca gttacacatt ttcaqacatc atcttgttta ttacaaaact taaaacacct
                                                                      300
tccaggcaag atccaaagca attttatcct aacattgttc accttcatct gtagagtcaa
                                                                      360
atgtatctgc cagcttgtgt tgacaagggg gaatgcttcc catttggtca aggttgaggg
                                                                      420
acagtaaagg aatcttgtat tctaatgagt acagcatcct ttcattgtcc aagccatcca
                                                                      480
ccttagggct ttgaggttca agtccaggtc tggagaagag aaagtttcat acccaacctt
                                                                      540
gtggtctttc cttcggtagt acattcgtgt cagcacagtc attagaaaag tctccagtat
                                                                      600
gaggaggtgg caattcatca cttgagacct ggttttagag gaatagggag gcgaacaagc
                                                                      660
aatctgccca ccgttggcca agactgagaa gatggagggc tgtagggcag tcaggatgag
                                                                      720
gagaacctgg aacagagcaa atttggctcc catgttctgc tcacccaggt gtagcctggc
                                                                      780
ttgacgggaa atgatgccca gggtccagag agccagcagt gtggacacgc cgaggaaagt
                                                                      840
gttgatccat agagctgtgc tcccctcaga aatgtctgct gggtcataga tgccgtcggg
                                                                      900
gatgagaaac aggcccacca gggtcagcgt tatcttcaag aaggcgtatt ggaaagggcc
                                                                      960
caacatcagc agctgaagct tcttcctggt gagcagcagc cgtggacagc aggggcagca
                                                                     1020
gcagcagcag gggcctgtgt ggaccatcat cggggtgtcc ctcagcgtcc tcagcactgc
                                                                     1080
etectteece ecaaageett ecaecatgae eageateage aggtaaaage acaeggeata
                                                                     1140
aaacgaggtg atggtcattt ccaccagcac cagggaacga gggatccaga gaccaaagca
                                                                     1200
gcacagcaca gacaccaccg tgggtgccga gctcttccag agcagagtcc gcctcttgat
                                                                     1260
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```
ggggcaaagggtgttcttgtacaggtagacggcatcctccaggaagatggcaatggagcc1320cagcgccagcaaggtcaggatgctagtgagggcaagttccacagggccagggctctcag1380gagttgggctgctgtgggaggctgagagaagcaggcggaggggatgccgtaattggtctt1440cagcacctccagaagatctgctgtgtacctgggtcaagctttatctgggtcctgcccgg1500ctccatcgccgcgaattccgccacg1525
```

```
<210> 5947
<211> 2234
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (358)...(596)
<223> similar to gi1710216 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5947 cagatggact gacccacagg catccacatg tggtgctgaa gaagccatga ggaaaggggg 60 aggtgggaag ggcctcgtcc agggtgtctg gctgcacagg agacatagca gctcccactg 120 gcaccctgca tacaagggaa aggcctcgaa atgcgctcac caaagcctca gagttttatt 180 atcaggaget cacattcagg agcaggtetg ettgtcaaga atccaagcae geetgtgtte 240 tgtggccaca ggagaggagg ggccgctttt aaatacaagc ctactcctgt cgttggacca 300 gaacaaagac ctactggcca gaagcacatg agaggaggag tttcactctt gtcgcccagg 360 ctggagtgca gtggcacgat ctcggctcac tgcaacctcc gcctcccaag ttcaagcaat 420 tctcctgccc cagcctcctg attagctggg attacaggcg tgtgccacca tgcccagcta 480 atttttgtgt ttttagtaga gacggggttt caccatgttg gtcaggctgg tcttgaactc 540 ctgacgtggt gatccacctg cctcggcctc ccaaagtgct gggattacag gcgtgagcca 600 ccacgcctgg ccgaaaaacc cactctcata acagaagtgc agactcattg ctagattcag 660 tgcccttgag tgtgccagag gtcctctgtg tttgagacaa tcctgtgtgt gccaggaggc 720 teegtgtgea ceaggggete teagaateee gettaceeag etggagaeea tgeetetgge 780 agccccatct cagccagccc tgctctctcc ctcttccctc caggtgaggc aaacttcata 840 ggaatctgta cctgaatgtg agctcctgat aataaaactc tgaggctttg gtgagcgcat 900 ttcgaggcct ttcccttgta tgcagggtgc cagtgggagc tgctatgtct cctgtgcagc 960 cagacaccct ggacgaggcc cttcccacct cccctttcc tcacggcttc ttcagcacca 1020 catgtggatg cctgtgggtc agtccatctg tccatgggca ggggccgctg tgagagaccc 1080 catgcgcgtg ggatgtggta gatgctgatt atggggccag ccacccatac aggtctatca 1140 ggtcgcaatg gaggccccac tggagcggga ggcaggctgg cctggacttc tgttqgatga 1200 tgggggccag gggatggtag gaggggcagg agagcaggtc tgcatctgtc tcagcccag 1260 gageteetgg tttggggeea getetaagga getteateee tgageetgge egagtataag 1320 ggggtcccgg atatccaatg ctgagaccta gacttttcta agcctctgca cccaaccct 1380 aacttggcct tttcagaccc atgagagtgc agggtgggtg tggacctgcg ccagggcttc 1440 ccagcctgat tgtgacatga tgtgagtcca cctagggagg agcaggggcc tccccgtctc 1500 ttccccttct tgcccagacc actttgctgg gctcagagcc ttccatggct cactttgaac 1560 tcagaagagt ttcccagctg cgacccaggc tgcaccccca ggcctgagga gaaactgagg 1620 ccccacatcc catacgtgtc ctctgagtca ggacaacagg ctcccggctg ggggcactgc 1680 ccttgctgcc aacacattca cctgccccag tggctaccat gtcctgtgcc ggtgaccagt 1740 gccagtcccc aacctggatg gtgccctgcc ctcatgaaga gccccccgga tgttcacctc 1800 tgcccagaga cccggcctgc ccaggaagag cagtctctgc tcttqtqtqq qtccctctqc 1860 ccccaccctg cccagggctc cccagcagcc tgaggcccct aaggaagaac agccctcaat 1920

<210> 5948

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```

```
<211> 1596
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (869)...(581)
<223> similar to gi5911959 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5948 ggtggaattc ctcagcaccg cctctcaaca gggatgactc agcagggatg actcagcacc 60 gcccctcaac aggcatgact ctgcagagat gactcagcac tgtcccttag cagggatgac 120 acagcaagga tgactcagca ctgcccctca gcaaggatga ctcagcactg ccgctcaaca 180 gggatgactc agggatggct tagtactqcc cctcaacaqq gatqactcaq caqqqatqac 240 teageacege cecteaacag geatgaetet geagagatga ettagtaetg eeceteagea 300 gggatgactc agtactgccc ctcagcaggg atgactcagc actgcccctc aacagggatg 360 actcagcagg gatgactcag cactgtccct tagcagtgat gacacagcaa ggatgactca 420 gcactgcccc tcagcaagga tgactcagca ctgccgctca acagacatga ctcagggatg 480 gcttagtact gcccctcagc agggatgact cagcaccgcc cctcaacagg gatgactcag 540 cactgcccct caacagggat gactcagcag ggatgactca gcactgtccc ttagcagcga 600 tgacacagca aggatgactc agcactgccc ctcaccaagg atgactcagc actgccgctc 660 aacagacatg actcagggat ggcttagtac tgcccctcag cagggatgac tcagcaggga 720 tgactcagca ccacccctca acagggatga ctcagcaggg atgactcagc actgccctc 780 aacagggatg actgcaggga tgactcagca ctgcccctca qcagggatga ctcagcactg 840 cccctcagca gggatgactc agcagggatg actcagcacc gcccctcaac aggcatgact 900 ctgcagagat gactcagcac tgcccctcag cagggatggc tcagcaggga tgactcagca 960 ttgcccctca acagggatga ctcagcagac tcagcaggga tgactcagca ctgccctca 1020 acagacatga ctcagcaggg atgactcagc accacccctc agcaaggatg actcagcagg 1080 gatgattcag cagagataac tcggggatga ctctgattgt ccttcagcag ggatgagtct 1140 gttttgctcc gatggaagca tctgtagtgt ccatcagcag gtgaatggcc aaagtggtat 1200 atactgtagt cacattcagc tataaaaagg aataaagtat cgatgcatgc cacaacatgg 1260 gtgaacctag aaaatactga tctaaatgca agaagccagg cacaaaaggc cacatagtat 1320 atgttcccat ttatgtgaaa tgtgcagaat aataataaaa atgtatagaa tagcaaatct 1380 gtagggacag acatgaggtg agtggttgcc agaagtggaa atgggagtta actataaatt 1440 gcacagggta ccttacagag atgatggaaa tgtcctaaaa ctagattatg gcaatagttg 1500 cactacgtga tcagtttatt aaaaatcgtt gatgtgtgtg tgtaaaatgg gtggatttta 1560 tggtttataa attatacctt aataaaggtt aacaaa 1596

```
<210> 5949
     <211> 599
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (77)...(438)
     <223> similar to gi995526 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5949
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caagcatgta gcccagtctc tcaatgtcac ttcatgttat gtatgtggag aagctgtaat
                                                                      120
aagagatcaa tggccatggg aagcctgaga attagtacct acagtacctg atgaattcct
                                                                      180
ggctcaaaag aatcaccctg ataatttctg atcctaaaag cctcaattat taaacaatat
                                                                      240
tgcatagcta gagaaggaaa agaattcact caccgcgtag gatgacttag ttgtcggaga
                                                                      300
cagaaactgt ataatggtac cacaaaaaca atcacttggt ggagttcaaa tcacacagag
                                                                      360
agaaaattta gtaaattctc aaagttgcaa actgggaccc acctgggagt cccaccgggc
                                                                      420
ttgggaacag ccccactgg gatttttact gggatatgtt agggcttgga gcttattgac
                                                                      480
aggtttactg gaccattggg caggtagttg ttgtttattg ggcactattt aaaccatctt
                                                                      540
tettecetae tgeeceataa aaacagggea aacteettgg ggttteeeet gttettaeg
                                                                      599
     <210> 5950
     <211> 3318
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (114)...(1736)
     <223> similar to gi755750 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5950
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                                                                       60
ggggagaagg tgttgttgcc ggagctgaga ccgggcggcc acagtccgca gggatgaacc
                                                                      120
tcgagttgct ggagtccttt gggcagaact atccagagga agctgatgga actttggatt
                                                                      180
gtatcagcat ggctttgact tgcaccttta acaggtgggg cacactgctt gcagttggct
                                                                      240
gtaatgatgg ccgaattgtc atctggggat ttctttgaca agaggcattg cttaaaataa
                                                                      300
atttagtgca cacatccatc cagtgtgttc tttatgctgg agccgagatg gtcataaact
                                                                      360
cgtgagtgct tccactgata acatagtgtc acagtgggat gttctttcag gcgactgtga
                                                                      420
ccagaggttt cgattccctt cacccatctt aaaagtccaa tatcatccac gagatcagaa
                                                                      480
caaggttctc gtgtgtccca tgaaatctgc tcctgtcatg ttgacccttt cagattccaa
                                                                      540
acatgttgtt ctgccggtgg acgatgactc cgatttgaac gttgtggcat cttttgatag
                                                                      600
gcgaggggaa tatatttata cgggaaacgc aaaaggcaag attttggtcc taaaaacaga
                                                                      660
```

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ttctcaggat cttgttgctt ccttcagagt gacaactgga acaagcaata ccacagccat
                                                                   720
taagtcaatt gagtttgccc ggaaggggag ttgcttttta attaacacgg cagatcgaat
                                                                   780
aatcagagtt tatgatggca gagaaatctt aacatgtgga agagatggag agcctgaacc
                                                                   840
tatgcagaaa ttgcaggatt tggtgaatag gaccccatgg aagaaatgtt gtttctctgg
                                                                   900
ggatggggaa tacatcgtgg caggttctgc ccqqcaqcat qccctqtaca tctqqqaqaa
                                                                   960
gagcattggc aacctggtga agattctcca tgggacgaga ggagaactcc tcttggatgt
                                                                  1020
1080
ggcacagaat caagtagaaa actggagtgc atttgcacca qacttcaaaq aattggatga
                                                                  1140
aaatgtagaa tacgaagaaa gggaatcaga gtttgatatt gaagatgaag ataagagtga
                                                                  1200
gcctgagcag acaggggctg atgctgcaga agatgaggaa gtggatgtca ccagcgtgga
                                                                  1260
ccctattgct gccttctgta gcagtgatga agagctggaa gattcaaagg ctctattgta
                                                                  1320
tttacccatt gcccctgagg tagaagaccc agaagaaaat ccttacggcc ccccaccgga
                                                                  1380
tgcagtccaa acctccttga tggatgaagg ggctagttca gagaagaaga qgcagtcctc
                                                                  1440
agcagatggg tcccagccac ctaagaagaa acccaaaaca accaatatag aacttcaagg
                                                                  1500
agtaccaaat gatgaagtcc atccactact gggtgtgaag ggggatggca aatccaagaa
                                                                  1560
gaagcaagca ggccggccta aaggatcaaa aggtaaagag aaagattctc catttaaacc
                                                                  1620
qaaactctac aaaggggaca gaggtttacc tctggaagga tcagcgaagg gtaaagtgca
                                                                  1680
ggcggaactc agccagccct tgacagcagg aggagcaatc tcagaactgt tatgaagacc
                                                                  1740
ttcgaagttc ttcattcttt ctcactttgc catcatgtgg cctctggaca ctgtggtcag
                                                                  1800
tcatttgaaa attgacttta atttaaaaca aaggeetgtg eeteecacee aggaggtggg
                                                                  1860
agggtgaatt ttatgtttaa atgaagaagt gaattatgga agaagagtat acgaccttcc
                                                                  1920
cttccctttc aagcataagt ccaaatagac tctcaggaat gaagatttgt gaagacatca
                                                                  1980
gataggaatt ttgactcatt taaactttga tgcttagtta tgttgctgga gaaaagatac
                                                                  2040
ttatgttttg ctcatctaac ttcattgtac ccagcgtcat tttgacatgt catttcctat
                                                                  2100
ctcccatttg ccttcggtcc tcaatgcatg tctttgagtg acttcttatc tgaaattttg
                                                                  2160
ctactggtat cctaggaaag cttttgttgg atactctcat tttaaacttc tcctcccc
                                                                  2220
agatacctcc tatatttcca tattgtgtgc aaaggatggg caaaaaagaa agtgcttgaa
                                                                  2280
agatttcaaa ttttcagaaa gggaacaacg aaggccctct cttcctctca taccacqttt
                                                                  2340
tgctcaagaa gctgggctgt aacaattcag ggttttccct tgttttcctc tcattgcatg
                                                                  2400
tttccctcca atattggttc attgtcatca atcatggttt ttgaagatag ctagttttat
                                                                  2460
ccatctccag caaagaatca tcaatagttt atattgcttt acctgtgctg gcttccagag
                                                                  2520
atggaaacaa acccaggtgt ctctcaacaa gctacttttt tactggggtg ggggaatcta
                                                                  2580
2640
gatcaaggtg aatttttgt atcactgcct gtggaaatct atcctcatca gtcattgcat
                                                                  2700
ttttccctgc ctatacctgt gctccttttt cttactgtgt tttcagtcac ttcctttctg
                                                                  2760
tgaaaggttg cttagctttt tttttgacat ttgttgttct ttatataaaa ataacagatt
                                                                  2820
ggatagatgt gtacatttgg tgtttgaaat tctctgaaaa tcccattagg aaaccaggtg
                                                                  2880
tgaaaagggc tcagtagctt ctctgagtgg cgtttttagc tgactggaag tgcttaatct
                                                                  2940
ggatcgtctt ttttttttt ttttttttc aatattttaa aaggagaatt taaatactgt
                                                                  3000
gcttactgtg aaatatatca gttggtgagc cgggcgtggt gggtcacgcc tgtaatccca
                                                                  3060
gcactttggg aggccaaggc gggttgatca cccgaggtca ggagttcaag accagcctgg
                                                                  3120
ccaacatggt gaaagcctgt atctattaaa agacaaaaat tagctgggcg tggtggtaca
                                                                  3180
tgcctgtaat cccagctaca ctggaggctg agtcaggaga atcacttgaa cgtgggaggc
                                                                  3240
agaggttgca gtgagtggag atcgcaccac tgccctccag cctaggtgac agaatgagac
                                                                  3300
tctatctcaa aaaaaaaa
                                                                  3318
```

```
<210> 5951
<211> 861
<212> DNA
<213> Homo sapiens
<220>
```

<221> misc feature

<210> 5952

```
<222> (452)...(11)
<223> similar to gi332565 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5951
gtggtggaat tcgcagcgcg tgtgcctgga gcgcgtgcag tgctcgacgg cctcgggcgc
                                                                       60
tgaggtgaag ggctccggcc gggtgctcag ctgccctggg cccagggccg tgaccgtgcg
                                                                      120
ctacaccttt accgagtggc gctccttcct ggacgtgccg gctgagctgc agcccgagcc
                                                                      180
gctggagcca cagcagccag aggcaccgtc tggggcctcc gagccagggt ccggggatgc
                                                                     240
caagaaagag ccaggcgccg agtgcttcca cttctcgctg tgcctgccc cgggcctgca
                                                                     300
gcctgaggac gaagaggacg ccgacgagcg cggcgtcgcg qtccacttcq ctqtctqcta
                                                                     360
ccgctgcgcg cagggcgagt actgggacaa caacgcgggc gccaactaca cgctgcgcta
                                                                      420
cgcgcgccct gcggacgcgc tctgagcctg gagagtttcg aagagccgtg gggcggggtt
                                                                     480
gattagcacg tggagctcgg gctgccgcct caaggaactt gctgggacgc tttgctgagc
                                                                     540
gtggcgagtc tggcgtgagg ggcgcgtgga gggaaaggag ggagactttg aaccgtcgac
                                                                     600
tcgcacccc gcagacaagt gagcgagctt agagagcccg ggcaatgctc cgaaagcctc
                                                                     660
tgacctcagt cttctcgtcc gtttgacctt cctacaaggc ctctagaatt cccagcctgc
                                                                     720
gtcagagtag gaagaaactt ccaaggcccg gagcagctgc ctccaagaaa aaggctccca
                                                                     780
actcccgggc atggttctaa ggccttggga ttggttttta actctaaata tcatattgta
                                                                     840
gcccttgcag tttgctggag a
                                                                     861
```

```
<211> 1345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1210)...(845)
<223> similar to gi595915 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

```
<400> 5952
tttttttttt ttcacaatga ttgtacttta ttgatgtgtt acaggaggta aggactttct
                                                                       60
gcttaaaata tttaaaattt acatgtgcac acaaacaaac acaggttccc ccacccatgg
                                                                      120
ggaagggcga gatgactctg aataaaggat ggaggagaag aagagggtgt agacggaggg
                                                                     180
cccttgaccc ctacaggggc agcaggataa ggaatagagt ggggcagaag gtgggttatt
                                                                     240
aagaagcatc ttgcttactg acatgaagcc acgtgcccag cgagagcaca gatgaggcct
                                                                      300
cattggcgta gaggaggccc ttggagggca ggcacacggt gcccaactag ccagccaagg
                                                                     360
ccaacgtccc aggggtaggg cggaagtggg gtggcgtgca cagggcaccc agcccaggcc
                                                                     420
tetgetgeec ceacetecet ceceacett tgagagaaaa gaeggtttgg geeteageea
                                                                     480
cggaccgacg ccgttaccgg cagcgtctcc tgaaactaca gagatacaat gtgtatcaac
                                                                     540
agggtgatcg cttctgaccc actgaggcag acagctagag gtgctgcatg ggccagaacc
                                                                     600
aatcctacag tatctttggt ttgtgggttt ccttcccgac ttgaatcctc cctctgtcca
                                                                     660
gcctctgggg tgggcctcag ggctgggaat gggctgctca atggcccaaa gcccagcctg
                                                                     720
acggcccttg gaggctgggg gtgctgccct tgccagccac aggcagctta ctcactgggg
                                                                     780
tgctgggact tgtaggagag gatctcggca gccagctgct gggggtccag gagctgtggg
                                                                     840
```

```
aagcgcccca tcacagcctc caccaggtgc gggggaaaca caccacacag cttagtatac
                                                                      900
acgetggeet geteettgge caggetgeet gecetgeece acgggeteet gecageeect
                                                                      960
gggctctgca ctgggggctc ctgaaggact gatgtgggtg ggggcagtgg gtatggttca
                                                                     1020
gaccagtact ctcgaggtgg aaaggcaggg ggcgcgggtq qqtaqtcqqc aqqqacactq
                                                                     1080
aagtggccag cacccatggc ccggccaaag gcagagaagg ctgcqqtqqc tqqqaqctca
                                                                     1140
gatccatagg gactgtagcc cgtgtaaggg gctcggggtg ggcccggctc accagggcct
                                                                     1200
cctcctcgaa ccccccaaag ttccgacatc tggctctcca gggagccaat gcccgagtcc
                                                                     1260
aggcaateet gggagaegta egggagtgag tecagegtet gtgggageea gtetgtggge
                                                                     1320
ccgaattcca ccgcactgta ctagg
                                                                     1345
```

```
<210> 5953
<211> 1346
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1306)...(399)
<223> similar to gi535586 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5953 ctttacatga ccttgctgtc ctcccttccc ttctcccacc ttccagcctc tggctacaac 60 acgcgtgcag tttaaggcaa aagctcagca aacccagccc ccaggattga ggagctcccg 120 ecceccatg cagetggact ecaceteage agaggacace agtecagete teageagtgg 180 cagctctaag cccagggtgt ccatcccgat ggtccgcata ctggccccag tcctggtgct 240 getgageett etgteageeg eaggeetgat egeettetge agecaeetge teetgtggag 300 aaaggaagct caacaggcca cggagacaca gaggaacgag aagttctgcc tctcacgctt 360 gactgcggag gaaaaggaag ccccttccca qqcccctgaq qqqqacqtqa tctcqatqcc 420 tcccctccac acatctgagg aggagctggg cttctcgaag tttgtctcag cgtagggcag 480 gaggccctcc tggccaggcc agcagtgaag cagtatggct ggctggatca gcaccgattc 540 eegaaagett teeaceteag ceteagagte eagetgeeeg gaeteeaggg eteteecae 600 cctccccagg ctctcctctt gcatgttcca gcctgaccta gaagcgtttg tcagccctgg 660 agcccagage ggtggccttg ctcttccggc tggagactgg gacatccctg ataggttcac 720 atccctgggc agagtaccag gctgctgacc ctcagcaggg ccagacaagg ctcagtggat 780 ctggtctgag tttcaatctg ccaggaactc ctgggcctca tqcccagtqt cqqacctqc 840 cttcctccca ctccagaccc caccttgtct tccctccctg gcgtcctcag acttagtccc 900 acggtctcct gcatcagctg gtgatgaaga ggagcatgct ggggtgagac tgggattctg 960 gcttctcttt gaaccacctg catcccagcc cttcaggaag cctgtgaaaa acgtgattcc 1020 tgggccccac caagacccac caaaaccatc tctggggctt ggtgcaggac tctgaatttc 1080 taacaatgcc cagtgactgt cgcacttgag tttgagggcc agtgggcctg atgaacgctc 1140 agaccectee agettagagt etgeatttgg getgtgaegt etcecaectg ecceaataag 1200 atctgctctg tctgcgacac caagatccag ctggggactc ccctgaggcc tgcctaagtc 1260 caggccttgg tcaggtcagg tgcacattgc agggataagc ccaggaccgg cagagagtgg 1320 ttgcctttcc atttgccctc cctqqc 1346

```
<400> 5954
ttttttttt tttttttc acaaaagcca tctctcttta gtgttttcat tcctgcccgt
                                                                       60
tcaaaccagt ttgtgcaagc tgaggatgag tgggtttttg gaaccgggag gcagagcatc
                                                                      120
tgggggacaa gacccctcct ggaaaatggt cctnatgcaa cactqctqaa qqctqqttaq
                                                                      180
acttgagaag caattgaaca ataaactcta cagaacctgg aaaatgttca aaagtgtcaa
                                                                      240
ggtggcttct ggctgttttc ctgcctccct gtggggggtc agttataccc atcagtcctg
                                                                      300
tgcaaaggtc ctggggactg gcccaggggc agccggattc ttccgctggg gacaggaagc
                                                                      360
ttgtccttgc ttaaccccaa gcagaagcca tgccaaatgg aacaaggttg ctcgggttgt
                                                                      420
gtgccccaag gtgctgtggc cccccaaaac tccgtggctc ctcaaagcaa tgtctttcat
                                                                      480
cctgtctcta tgttatgtcc gccccttttg aaaagtgttc attcaaggtt gtaggtttcc
                                                                      540
ttgagaattt tgtggatctc ctcgagtgca agcctgtgga agtatgcttt tcaagataac
                                                                      600
gagggcatgc attgtccatg ggaggaggag gagggcctgg ttgagctgca cagcttccac
                                                                      660
ttgttcttcc gggccaccgt ctccggcttt cagtggggga aagaggttgg gaaaacctga
                                                                      720
acteteaatg eccetggaac ateteggtge ttgttgtgga aagggeaage aetgtggtgg
                                                                      780
cgcttqactc ccggacaagt cccagcaagc ccccagggtc aaggctctcc atgaaggcga
                                                                      840
aagctgacgc tttggaatgt gcaaattaat cgaatggcac cgggggaatg gcaagaacaa
                                                                      900
tgcccagcaa cggaagttga aggcaacacg aatgtggcca ttctgctgtt tccagcataa
                                                                      960
cttgccagag aagggcccct ggtggttcca aaactggccc cagggtgttg atgtgttggg
                                                                     1020
acttgaggag ggcatcatca tcactgtcca ttaggccctt cccatggacc acggcggcat
                                                                     1080
tgttcaccag gatggtgatg tcacccacct tctcccqqac qqccttqqcc qtctqqtaca
                                                                     1140
cctcctcccg gttgcccaca tcacagatga agtaatggca ctcagtgccc atctgccgqa
                                                                     1200
tetecteegt egteteette aggeatttet eagteeggee ceagagaaca atetttetgg
                                                                     1260
egeegegete egegaacteg egggegaget gaegeeegat geeteteeeg eegeeggtga
                                                                     1320
tgaggacgtt ctcccgcgac aggtcccgca gcttggcggg cagcaccagt ccgacggctg
                                                                     1380
ctttcaccac cagatagate atetgtagag ggaacateae cagegegeee ageegtttee
                                                                     1440
acaccateet eegegeegeg gageegggea gggggegaaa eteeeeggge egageaatae
                                                                     1500
aggaattaaa aaacaccccg aacaataaat agtaaaccga ataaggagga gagaggcgtc
                                                                     1560
ccacctggcc actcttgaaa tcacctcttc ccaaatgcaa agcaccgggt gagaaaaaga
                                                                     1620
agaaaaaaa aa
                                                                     1632
```

```
<210> 5955
<211> 1771
<212> DNA
```

<213> Homo sapiens

```
<220>
<221> misc_feature
<222> (905)...(307)
<223> similar to gi2047353 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5955 tcactattcc atgtggcgga attcgcgcac agtaagggag aatgtgggga ctcagagcag 60 gageetttgg agteagagaa gtttteeaga aggaacatet aageagagee eggetaggea 120 aagtgaactg ccatggcgag ggcctggaga cttccagaag cgtgataact gctcttaatt 180 gttcaaccct caccaggagc taagccctgt gaggtgggtg ctattagggt ccccattcta 240 cagatgagga aactgaagct caggaagtct cctggctcgc cagcaaggca gctggaggtt 300 gctgacctcc gagggaggcc ccagccaagg tgggtgctga gtgggcgccc cctcctctcc 360 cctctcaggc ccagtaccgc cgaggcctgg agctgtccaa gcaggccgct cagctgggag 420 ctacagccag agggctggg gaggcagaac gtgcagagtt cccagagctg gcagcctttg 480 cctctaccca gcgggccttc caggctgagc tgacccactt ttacatggcg gccgagcggc 540 aacqcacgga cctcgagacg ctgctccacc tgcaccgctt ctgcaagagg atgacctggt 600 tecacatgga etgteaggae etgatggeee ageteagget ggacaagaee teaagggtea 660 gtcctgggga ccagcgccgc ctccaccgct acctgcagcg actggcatct gagttccctg 720 ctgagaagct cgcagccgtg gggctgcagg tggcctccct gagccgggca ggcctgggcc 780 aggagctatg ggaggaggcc cggatcaggc atgaggagat ctggatgctc ctggagaagg 840 cactgaccca cagetettge ecagaggete cagetgetea eteagegege ceagaacgaa 900 gaggggtggc agccaagggc cagggtgtga gtgtagaggt cacttccaag gggaggtggg 960 atcagcctcc actagactca ctgggcatgg accatttgcc aaagtcctat tggcttctca 1020 ggagctgtct cagccaagag tcacacactt gatacctaaa atggcttcag gaatcttcca 1080 agactgaaga cttccccagg tgtggtctag ggcctgcctg cctcagagcc atqaqcagag 1140 ccgqtcaaaa ggcttcctag ggaatcctac cccagacatt aaaatagact cttggtgctg 1200 gcaggtggct ggaatctgcg tttgtagcca agtgctcttc ctgtgtgact cagcaaagtg 1260 ggggtgcatt tggggaacac ccggggctgg ggcctgagtc ctccacccaa agccaggttt 1320 gattettgca tteeceteee tgeetteeat ceagacagge ceaaggatge aagaggegtt 1380 gatcagccca tctccatcca tgcctgttgc ctcagagagg gccgacggct tttaaaatgc 1440 tgttgccata gcaacagcat tccagccagt gggtaccaca ggcagggagc cacagaaact 1500 ggggtgctgg gatggaaact gacttgtgag agaccacagc tactgctaga aggaaggggg 1560 gcaaagcggg cacaggtaat ctaagaatac ttgggcggga ggagtcccca aggttacctt 1620 gtgcatccct ctgtccccag aaagaactgt accccaacaa tctctcccct cactgcatcc 1680 cctggggaag aagggaatgc agaaatgaaa tgtcataatg agtaacaatg tataaaaata 1740 tcgaataata acagctaaca tttcttttqc a 1771

```
<210> 5956
<211> 979
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (927)...(0)
<223> similar to gi386923 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<210> 5957

```
<400> 5956
atttgacata gatctcttaa agggaattta ttgcttccat ggagatttta gatccgatgt
                                                                       60
tactgaggga aattaggtag ctgggcggct ttaccccagg catctcttag taggtaaaca
                                                                      120
ccttcctttt caggatggga ttcacaaggg cccttggtcg tctggaagca ccaactgaac
                                                                      180
gcaggcctcg gatgatcaag acggtcccca ccacaatgcc cacgaggccc acagacaacc
                                                                      240
ccagggcgca gaccacacgt ctctgtgagc tctgactaag gttgttggaa tctcagctcc
                                                                      300
ccagtgtttc agaagaggct caaaccaggc ccccagttgc tccacctttg cagttcataa
                                                                      360
atctcatcat tcaaaaggga aggaagggga ggtaacctga tcttgaagaa ggaaatgatc
                                                                      420
actetttgga gaggaaggee tggteteaga aacacettet gtgaetgagt geceattget
                                                                      480
cagccaggtg atgttgacca caggaggaaa gatgttgtcc acaagacaga tgagggtgtt
                                                                      540
gggctgaccc agtgtcacgg gagacttgga aaacactgtg acctcaggaa cctcattggt
                                                                      600
agcagcggta gagttggagc gtttaatcac gatgttcaag ttatgtttta gcacagcgat
                                                                      660
gtttgtcagt gcaaattgcg ggtcaaatct tctaaatctg cggaacagag gcaactgcca
                                                                      720
gacagtetee tteeteteea ggteeacata gaacteeteg tetecateaa atteatgget
                                                                      780
gtactgccca gagggaccat aagactggta caagtttaca ccgtaagagg caacatggtc
                                                                      840
agccacaatg tetteacete cacaaggget cateaeggtg gteagggega gggeeeceag
                                                                      900
catcagaget tigttiagga teateetett eecaaggeag eeteageagt tgetgtietg
                                                                      960
agcgaattcc acgcacact
                                                                      979
```

```
<211> 1682
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (285)...(1476)
<223> similar to gi6002678 in the genepept database release 114,
Run with FASTXY 3.3t00, default parameters
```

<400> 5957 ttttttttt ttgatggagt cttgctctgt cgtcaggctg gagtgcagtg gcgcgatctc 60 ggeteactee aacetecace teeegggtte aaaggattee eetgeeteag eetetegagt 120 agctgggact acagatgcgc gctaccacac aaggctaata ttttgtattt tagtagagac 180 gggatttcac catgttggcc aggatggtct ccgtctcctg acctcgtgat ctgcctgcct 240 tggcctccca aagtgttggg attacaggca taagccattg cgccatgctc aaggttctta 300 attacatett taaaggeeet tttteeatgt acagtaacat atteaatggt tetggggatt 360 aggacttgga gccattattc tacctacaac aattagtatt ggacttccat cattttctat 420 cactettgta ategagaaeg gaetatttea etgggagtag caagteataa tgtttgegtt 480 ggcatttgtg tgggggttta tcttcattca ttaaataatt gcatgtaaag aaaattcctg 540 tcactatttc aaatgtttca tgtagttatt atagtgcttc agaatccaaa gggttatgtg 600 ttacttatgt aagatgagca gtctaggggg tggagaacag gtcatctagt gcagattctt 660 cctagctgaa gtgtgttttc tctggggaca accaagtagg atttaattgt tttgcttcct 720 tttttgggaa cttagaccca tcttgcgatg tcctaagtct ccaagcatct tatttgacct 780 gcttatacac atttgactaa atagctaaat atgaccacat tgacgtggta aagctttaac 840 acttttgtcc agattgaatc actccatctg ctatcagtta agcagtggaa aactgttatg 900 gaaaagcaaa catgttttga tagatttaat gtgtaaagaa ggtatccata ctctggaatg 960

```
ctgctgatca ataaatgagc tgcaagactt tgttcgaaac aacactcaag cacaactgtt
                                                                    1020
ttactttcca taccaagttt ggctgtgact gaaatgaaga acatcagcat tgatctttgc
                                                                    1080
tttgcacttg tacaagagac tatttgcaga gagccaaata taggcaacag aggatttaat
                                                                    1140
atcttgccaa aaaatacaaa atctgttccc ctttaaagca tggacactct atcctttctt
                                                                    1200
gtgggatctt ggctaaaagg aaaatatagg cttttaaact cccctatttc cttctgttga
                                                                    1260
aagcttaaga atcttttca aatgagctat gtatggtttt gtggtatttt atgtttccaa
                                                                    1320
aagaaaatgg ctacatgaaa aatctgtcca gtgttatcat ttttcttaca aaaaatactt
                                                                    1380
ctagttatgg ttgtattaat taatttgatt gtgataatga ttacacaatg tttacctata
                                                                    1440
tcaaatcatc atatcgtata ccttaaatat atataacttt tatgtgtcaa ttataactca
                                                                    1500
gtaagtctgg gaaaatatcg ttaagtcaaa gattagagtc aacagaaata aagaaaaatc
                                                                    1560
atactttgat aacttcagga ctaatcaagg atcaatgggt gacatgatat catgctatgt
                                                                    1620
gccattttgt gttaaacaaa ttacaccaac aataaaaaa attggcttca atcaaaaaa
                                                                    1680
aa
                                                                    1682
```

```
<210> 5958
     <211> 1188
     <212> DNA
     <213> Homo sapiens
     <220>
     <221> misc feature
     <222> (1024)...(585)
     <223> similar to gi3169120 in the genepept database release 114,
       Run with FASTXY 3.3t00, default parameters
     <400> 5958
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aatatatggg gtagttatcc caccccgcg gqcaqaqatt cagqaqqqqq qattqtaaqa
                                                                      120
gacgccctcc tctgtacgct cgatataaag agaagtcccc tcccatccct cccatgtccc
                                                                      180
tttatgatat attgagacag ctcagtaaat attttctaaa attatttacc ccctgggggc
                                                                      240
agagcctgag cagggaggat gataagggat gccggcctct gtatgattga aataaagaga
                                                                      300
aataaccaac tctagcagct gtgagtcatt ctgaaagatg tagagaatac agggactaga
                                                                      360
agcgcttata ttctcccacc aaatttgcat acatgacaaa aaacaggcaa aaggcagaga
                                                                      420
gacccaaaga cgggatttat tgggggccca agtcatcacc tggaaagtca agaaagcctt
                                                                      480
tgaagtattc gcggggatct tcatgatgag caggaacagg gctcatcatg qcaaqqactg
                                                                      540
tgaataaagt caaaaaactg aactctgttg acctgggcgc accccactgc aggtaacgga
                                                                      600
aaagttcccc ctgttcccac agggcaatgc caattacctc ggcccacttc gtaagggtgc
                                                                      660
acagaacgaa acaaaatctg tccaaaagct gggaacccaa ggaaactttt gggttttaaa
                                                                      720
tccatccatc cagcaacctc aactgtcttc ctcgatcttc cctttccact catagatgga
                                                                      780
tgtaatctga gggatgaggt tgacgcaggc tgctaggcgc ttctccacca cqqccctqqc
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gatctccttg gcgaccttct cgttggggca agtaacaaag gctgcagaga ccgagcccgg
                                                                      900
aacgtagcca gagccggaat ccgaggccgg cgagggctgg gtcggagggc ttccagaggc
                                                                      960
catggtcagc aagactcggg gtagcaacaa aaggcgggag gccacaggca gcagcgccgg
                                                                     1020
catccaaaca aaagacagga gcagagaggc cactccgccg agcaggaccg cgggagcccq
                                                                     1080
cccccactc atgcggccta cgctggtaca ggagagttga tctcaaaggc cacacgtcac
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acggagaaac aaccccagga agagcggcct cttcttacct qqqtqqca
                                                                     1188
```

```
<210> 5959
<211> 2167
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (559)...(1470)
<223> similar to gi416520 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

<400> 5959 ggaaccgctg ggagccgggg cccagcgcgt gaggacggag cgcqctqaqc qaqqgqaqq 60 tggctgccgc ttctcccgcg tccgccattt tgttgctgtg gctattggga acaagctggg 120 caaaagcacc ccggaggcgc gacgctcctt cgagttcggt gcctcgtgtg acggcggggg 180 tcggtgaaga cccgtcgagc tgcggcgccg gcgcgttcca ggccgggagt cactggaggc 240 acccctgggg acgccgagca gcccgagaac cccggggtgg cctccgctgc ggctcgggtt 300 tgcctgcccc gaccccccgg ctctgccgtg cattcccqgg cgqctctctc cgtqtqqcqq 360 ccccggagca ggcgggcggc gtcggaggat gctgcgggcc cggagccgag aggaaagtqc 420 tggcccagcc ctctgagcgc tcctcgaggt gtgcgagagg cccttcctcg gccccaaaqc 480 cgtctgccgg gctaaggcgt gcagagcagg cgaggacagc cgccgcccct accqccqcaq 540 agtccccggt ccaacaccat gtcctccgcc aggttcgact cctcggaccq ctccqcctqq 600 tatatggggc cggtgtctcg ccaggaggcg cagacccggc tccagggcca gcgccacggt 660 atgttcctcg tccgcgattc ttccacctgc cctggggact atgtgctgtc ggtgtccgag 720 aactcgcggg tctcccacta catcatcaac tcgctgccca accgccgttt taagatcggg 780 gaccaggaat ttgaccattt gccggccctg ctggagtttt acaagatcca ctacctggac 840 accaccaccc tcatcgagcc tgcgcccagg tatccaagcc caccaatggg atctgtctca 900 gcacccaacc tgcctacagc agaagataac ctggaatatg tacggactct gtatgatttt 960 cctgggaatg atgccgaaga cctgcccttt aaaaagggtg agatcctagt gataatagag 1020 aagcctgaag aacagtggtg gagtgcccgg aacaaggatg gccqqqttqq qatqattcct 1080 gtcccttatg tcgaaaagct tgtgagatcc tcaccacacg gaaagcatgg aaataggaat 1140 tccaacagtt atgggatccc agaacctgct catgcatacg ctcaacctca gaccacaact 1200 cctctacctg cagtttccgg ttctcctggg gcagcaatca cccctttgcc atccacacaq 1260 aattgacctg tctttgcgaa agcaatccag aaaagagtac cctgtgcttt atgacaagac 1320 tgccttggca ttagaggttg gtgacatcgt gaaagtcaca aggatgaata taaatggcca 1380 gtgggaaggc gaagtgaacg ggcgcaaagg gcttttcccc tttacqcacg tcaaaatctt 1440 tgaccctcaa aacccagatg aaaacgagtg attgctgttg ccctgtttcc tgctgctttg 1500 ttgttctgcc tgtcctagtc tcctttgaag tgggaaagca ttttctctca taggcaagtc 1560 acactgcatt gccgaagtcc agctttctgc agactggcag tcgcacacac atttggaatg 1620 cacacagegg etgeeteetg atgtttgtat catagtegta ttgtgcaaag agtageegat 1680 tttagagttc ttttggatca taaactggaa atactgatgg aagcacacaa gtggagagaa 1740 gttgacgtgg aaagggtctt ccttctcatt gctgcccgtt tgtacatggg actgattctg 1800 tcgtgttcac cagagaaagc ttgaggccat ggcgagatac tgcatgtttg ctgttccaca 1860 aagcagtggc ttagctgcca tcttgctttt ctttggacaa caggaagtga acctggggtt 1920 ggggaggtgg ggacagagcc gggcgcagtc gggggcacag ccctgaggcg gggctgaggg 1980 ccaggccgcc acgtccctgg accctgaaaa cgggctcgga cccccqctqc aqcqtqqact 2040 ccggtgtggc cgcggggcgt gcaacccgga ccctggccag ctccgtqtcc tccaqacctt 2100 tactcatggc cccgcatcgc caggccgagc tgcaccttcg gtccccgccc gcggcagccg 2160 aggtagg 2167

```
<219> 5960
<211> 1295
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1257)...(861)
<223> similar to gi975687 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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                                                                   180
gaagaaagta ttctaaccaa ctaaaaaaaa tattgaaacc acttttgatt gaagcaaaat
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gaataatgct agatttaaaa acagtgtgaa atcacacttt ggtctgtaaa catatttagc
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tttgcttttc attcagatgt atacataaac ttatttaaaa tqtcatttaa qtqaaccatt
                                                                   360
ccaaggcata ataaaaaaag aggtagcaaa tgaaaattaa agcatttatt ttggtagttc
                                                                   420
ttcaataatg atgcgagaaa ctgaattcca tccagtagaa gcatctcctt ttgggtaatc
                                                                   480
tgaacaagta ccaacccaga tagcaacatc cactaatcca gcaccaattc cttcacaaag
                                                                   540
teetteeaca gaagaagtge gatgaatatt aattgttgaa tteattteag ggetteettg
                                                                   600
gtccaaataa attatagctt caatgggaag aggtcctgaa cattcagctc cattgaatgt
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gaaataccaa cgctgacagc atgcatttct gcattttagc cgaagtgagc cactgaacaa
                                                                   720
aactettaga geactatttg aaegeatett tgtaaatgta caeteegeaa tttteecaag
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etcaaagett teectcagae atteceeett tteteetttg aatecateee gaeetgggat
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cccaggtgta cccggaatgc cattggcccc agggetcccg tctcgaccag gcactcctgc
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tggcccttgt aagcacattc cattatacag gtccaccacc tccctctgcc ggagctgcgc
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teceggetge egggeagege ggagetggag geggaggaga cegaggagag gaacgtggte
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agegtetgge teegeegege teegaggeeg eegeaggetg cateaatgeg eettteacee
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```

```
<210> 5961
<211> 5694
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (207)...(2938)
<223> similar to gi577301 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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```
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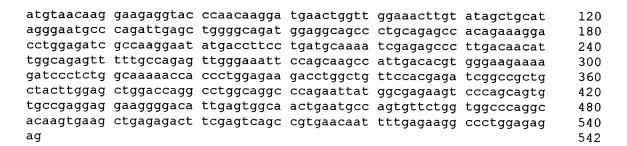
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<210> 5962
<211> 2014
<212> DNA
<213> Homo sapiens

<220>
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<222> (1452)...(2009)
<223> similar to gi1420583 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
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gcctcttttc tcactgtgaa gaactgatga gacagaattc ctgagaaggg aacatttagg
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agggaaaaga atattacaaa acagactaac cagaaaaacc aagaccccat caagtatcct
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ctacagagge ggaggataaa teetaagaaa cagaaatgta taaccageee caatgettee
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catacttctg cattaggtca gtgtgaacat ggctttgctc ccaatggtca gacctgacat
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tatgacaaac ccaaattcct aatcctgaag tactttgagc cactctacat tgtggccact
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caataataga ataaatttgt gaaaaagctg catgttttaa tttaggaaat gagtagaagt
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gctcaggctc tgcagaatca ctgtgtccag tgcttcctga gatgttcttt cagctgagga
                                                                      960
atggaaggca gcagctgctg gcactcatga caacgaaggg gcagcttcaa gagctcaggc
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atcccatctc ggacagttac tctaccagcc tcttgtacca tctcgatcac agcttgtgat
                                                                     1080
tctaggaagt attctgtatt gaaagaattc caatgttttt tgtttttaag gcaaggagaa
                                                                     1140
tcaaaatcct ggctgatcac atgaagatgt acatggctca tactcggaat ggcgtggtag
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cccaatcgga agcggagttt gctggaccca gcaaaatcta caatcacctt ttcccccaca
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gtgtgcatat gcttaaggag ttcaaggtgt tcccctggcc acagccttca gactggaaat
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ggaggtccac ggtaagacca gccaatggta acgggccttt gggtatttat cctttatcac
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catgtggaga acctggccag gctgcagctt cacctcttgg tccttcccaa ttacgactga
                                                                     1740
gtcaatgctg gtgggattga ctcctacctg ctttaccttg acatatccct tgttacactc
                                                                     1800
tgctttcaac tgtacttgct gtcgagaaca tttcttatca gtgatcttgg tctctgggcc
                                                                     1860
acgcccaatc acaactgctt ccaaatgtgg aagtctgatt cgctggtgcc ggctgtcctg
                                                                     1920
tctcaccaac cagcacaccc gcatcatcac tctccagaag tcggagacgg acaaattcac
                                                                     1980
cctcgtgcca agcatggcgg aatgcatcta acag
                                                                     2014
```

```
<210> 5963
<211> 542
<212> DNA
<213> Homo sapiens
<220>
<221> misc_feature
<222> (463)...(403)
<223> similar to gi4678534 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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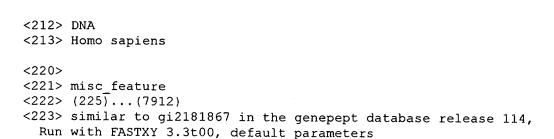


```
<210> 5964
<211> 1224
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1206)...(51)
<223> similar to gi3002527 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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                                                                      300
cattgaaaat gaggggtcag agtgtcttta cttacattat actaatgtga aattccctat
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gtgagaggtg tagtaattga gttggggtgg ctacgtggaa tagtttataa agggagtttg
                                                                      420
catgaatttt ggcaataagc agaccagcat aaataaatgg tgcacatttc actttcttt
                                                                      480
ccactettte cagaggegea ggaattggtg ggettggeat aactgttgag ggaccateag
                                                                      540
agtcgaagat aaattgcaga gacaacaagg atggcagctg cagtgctgag tacattcctt
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tcgcgccggg ggattacgat gttaatatca catatggagg agcccacatc cctggtgagc
                                                                      660
tattcctcag agaggacccc agagaataat tgattttgca ggaaaatggg tttgattttg
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cttatctctc tgagtgggga aaacaatctg atatttgtaa tagctgcaaa aggagagttt
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aagcatcggc ttagaatttt gactggaaac agttgtgcgt gtgttggagg acctagttct
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tgattcaggg gaaagctggt tctttacaaa gttgaaaatc acagtggctc acacctgtaa
                                                                      960
tececaaact ttgggaggee aaggeatgea gattgettea ggteaggagt ttgagaceag
                                                                     1020
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                                                                     1080
ggtgcgtgcc tgtaatccta gctatgtggg gtgggggctg tgatgggacg atgtctgaga
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gaggaagacc ctgtctcaaa aaaa
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```

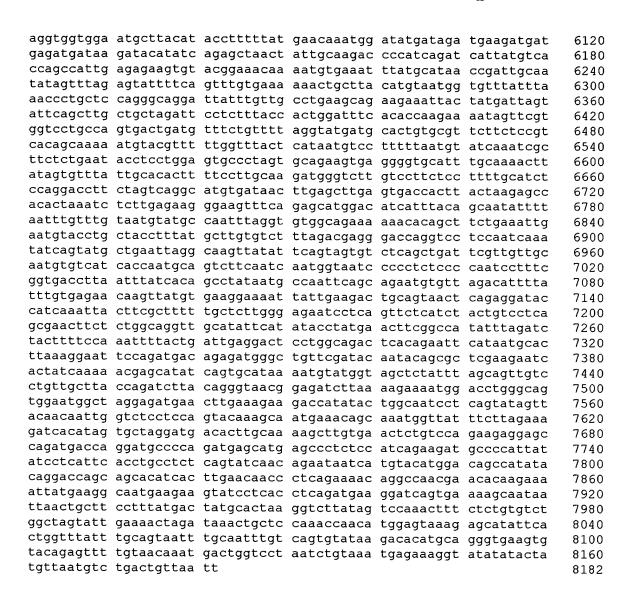
<210> 5965 <211> 8182



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2640

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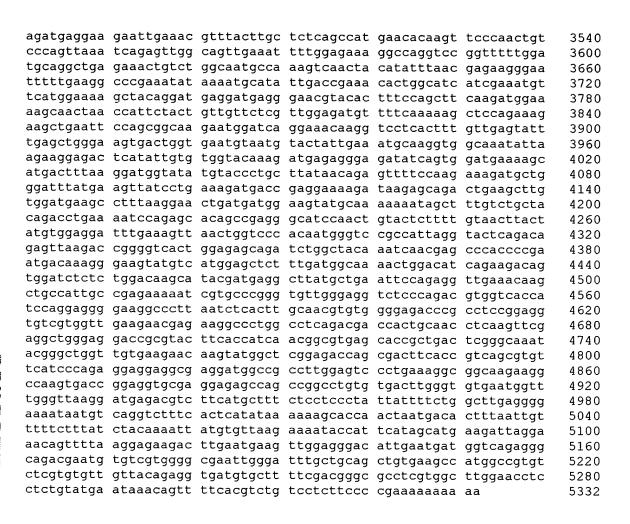


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<210> 5966
<211> 5332
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (506)...(4870)
<223> similar to gi407099 in the genepept database release 114,
  Run with FASTXY 3.3t00, default parameters
```

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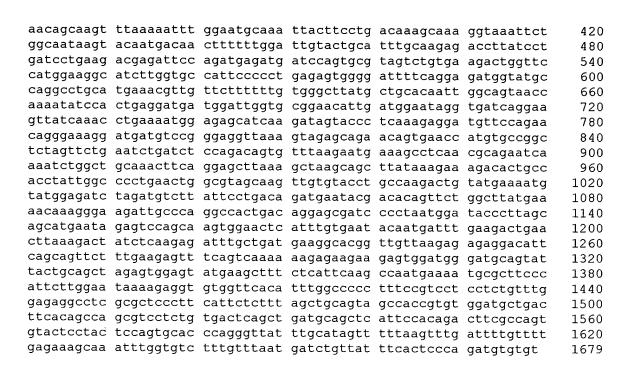
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```
<210> 5967
<211> 1679
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (85)...(1199)
<223> similar to gi4972090 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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gtccttgagg aggacgagga gctggagaat gaggcgtgcg ctgtcctggg cggcagcgac 180
tccgagaagt gctcctactc tcagggctca gtaaagagac aagcactata tgcctgtagt 240
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catggaagtc acaaactatt tgagctatac acaaaaagaa attttcgttg tgattgtgga 360
```



```
<210> 5968
<211> 1442
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (468)...(1241)
<223> similar to gi554204 in the genepept database release 114,
    Run with FASTXY 3.3t00, default parameters
```

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gcactttaat cgggcgagag aaaaccgaac ccttacagaa gatgccagag ggcagagtac
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aaaagatagt cctagaggca ggaaatggat taccatcctg gaaattcaat gaccagcttt
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